

**MANHATTAN PARKING GARAGES 1897 – 1930: SIGNIFICANCE AND  
PRESERVATION**

Hilary Grossman

Submitted in Partial Fulfillment of the Requirements for the Degree

Master of Science in Historic Preservation

Graduate School of Architecture

Columbia University

May, 2013

# **Table of Contents**

Introduction: Abstract .....	1
Chapter One: History .....	2
1897 – 1906: The Beginnings .....	4
1907 – 1910: Development of the Automobile Industry and Garage .....	12
1911 – 1916: The Garage becomes Widespread.....	15
1917 – 1930: The Age of the Automobile .....	18
Chapter Two: Survey .....	27
Survey: .....	28
Analysis of Survey:.....	76
Chapter Three: Significance .....	88
55 East 90 <sup>th</sup> Street (1904):.....	92
102 West 107 <sup>th</sup> Street (1906): .....	94
214 West 80 <sup>th</sup> Street (1906): .....	96
137 West 89 <sup>th</sup> Street (1906): .....	97
622 West 57 <sup>th</sup> Street (1908): .....	100
147 West 83 <sup>rd</sup> Street (1908): .....	101
159 – 165 East 77 <sup>th</sup> Street (1913):.....	102
Post-1916 Zoning Resolution Micro-District Garages: .....	103
337-343 East 64 <sup>th</sup> Street (1917): .....	105
3-17 East 102 <sup>nd</sup> Street (1924): .....	106
4650 Broadway/ 2 Sherman Avenue (1926):.....	108
152 East 87 <sup>th</sup> Street (1929):.....	109
406 East 91 <sup>st</sup> Street (1930): .....	110
Chapter Four: Preservation .....	120
Preservation Recommendations:.....	127
Bibliography .....	134

## **Introduction: Abstract**

This thesis is a survey and study of the purpose built garages erected between 1897 and 1930 with a focus on upper Manhattan north of 50<sup>th</sup> Street. This study is bracketed between the years 1897, when the first commercial garage was opened in Manhattan and 1930 when new zoning regulations and an economic downturn ended the construction of purpose built garages in Manhattan. This thesis identifies and defines purpose-built garages as a distinct and significant architectural type and makes a case for their preservation by highlighting their historical development, architectural design, technical features, and cultural significance. In conclusion, this thesis puts forth a complete study of the early 1900s upper Manhattan purpose built garage building from its development to the present day.

## **Chapter One: History**

### **Introduction:**

The emergence of the automobile industry changed the streetscape of Manhattan in the early twentieth century. The automobile brought forth new infrastructure projects such as bridges, tunnels, and widened streets. In addition, it brought forth new building types such as the gas station and the garage, which developed alongside the automobile. The history of early garages is important because it expresses the development of the auto industry in New York. In tracking the garage's development, I have identified four time periods: 1897 – 1906 (The Beginnings), 1907 – 1910 (Development of the Automobile Industry and Garage), 1911 – 1916 (The Garage becomes Widespread), and 1917 – 1930 (The Age of the Automobile). Each time period is defined by its own developments in technology, infrastructure, culture, and stylistic preferences.

1893 was the year when the first automobile made in the United States was sold in this country. By 1895, over five hundred auto patents were filed in the United States. Automobile trade magazines like *The Horseless Age* and *Motorcycle* hit the presses during this period. Early automobiles were expensive. Their use was limited to good weather days due to their open carriage design and type of construction. When exposed to cold or moisture early automobile radiators would freeze, doors warped, fenders bowed, paint flaked, and frames cracked due to the quality of the materials.<sup>1</sup> Therefore these early vehicles were marketed and sold for recreation, leisure, and sport. They were not for everyday transportation.<sup>2</sup>

The prime form of transportation in the 1890s and into the early 1900s was the horse and carriage. This is reflected in the fact that in 1896 there were 4,649 stables in Manhattan alone.<sup>3</sup> These stables varied from small private stables to large public commercial stables. The private stables were small, and usually two to three stories with an apartment on the top floor for a caretaker. These private stables adopted the styles of the townhouses of the upper middle class and wealthy residents in Manhattan, using Beaux-Arts and Romanesque Revival in order to blend into the surrounding fabric and to conceal their utilitarian interiors.

---

<sup>1</sup> (Whalberg 1998)

<sup>2</sup> (Fink 1970)

<sup>3</sup> (Jackson 210)



On the other hand, the large public commercial stables were usually four to five stories tall and had no live-in accommodations. Their interior boasted open plans, with elevators to bring the carriages up to the higher floors and ramps for the horses.<sup>4</sup> An example of an early commercial stable following this form is 201 - 205 West 75<sup>th</sup> Street, the New York Cab Company Stable. [Plate 1.1] The New York Cab Company Stable was designed in 1888 in the Romanesque Revival Style by C. Abbott French & Company. The stable had separate levels for horses and carriages, along with a blacksmith shop and a maintenance facility. There were ramps that brought the horses from the ground to the second level for storage. The third to fifth floors were reached by an elevator for the carriages. The stable housed only New York Cab Company cabs.<sup>5</sup> In 1910 the New York Cab Company Stable was converted to a garage. Today the building still functions as a garage.

Horse and carriage transportation being the popular form of transportation in the last decade of the nineteenth century, the only known garage that stored cars in Manhattan was the Electric Vehicle Company garage at 1684 Broadway. This garage, which opened in 1897, only stored the Electric Vehicle Company's cars. The cars were manufactured within the facility. It was not open to the public.

When cars started to be produced for the commercial market in 1898, there were few places that would store automobiles. Stable owners refused to store automobiles because the noise and fumes from the car would frighten the horses, and the ammonia from animal waste could tarnish the metal frames of the cars. This made it problematic and inefficient to store automobiles and horses within the same facility.<sup>6</sup> In reaction to the limited storage opportunities in 1899, a group of wealthy automobile owners founded the Automobile Club of America. George F. Chamberlain, the founder of the club, said that, "the necessity of a club was forced upon him by the difficulty he encountered in trying to find a livery stable keeper who would store and care for his motor carriage. When the proprietor of a stable learned that the vehicle was horseless he looked upon it as an enemy to his business and not to be harbored at any price... to establish a depot for the proper storage and care of vehicles, and where all forms of automobiles... may be properly housed and cared for by competent mechanics, and where

---

<sup>4</sup> (Aspegren 1998)

<sup>5</sup> (Postal 2006)

<sup>6</sup> (White Jr. 1911), 84

supplies of all kinds for the purpose will be kept.”<sup>7</sup> The push by the Automobile Club of America and other car owners for automobile storage marked the beginning of the first period of the garage’s evolution.

### **1897 – 1906: The Beginnings**

On the streets of New York by 1900, there were 8,000 cars that needed a place to park. To meet the demand, the Automobile Storage and Repair Company converted the St. Nicholas Rink building at 1-57 West 66<sup>th</sup> Street into the first commercial garage in Manhattan that was open to the public. Advertised in the *Horseless Age* as “Transients Accommodated”<sup>8</sup> and “The Horseless Stable,”<sup>9</sup> it offered storage, care, battery charging, and a repair shop. [Plate 1.2] Other car storage companies started opening garages all over the city in other converted buildings. The Steam Vehicle Co. of America opened a storage facility at 160 West 56<sup>th</sup> Street, New York in 1900.<sup>10</sup> [Plate 1.3] It offered storage, cleaning, and charging. Charging was offered because the most popular automobile type in 1900 was the electric vehicle. The electric automobile was invented in 1839 in Scotland and by 1900 it had been on the market longer than the gasoline powered vehicle, allowing it to gain popularity. The gasoline-powered automobile was invented in 1885 in Germany and did not enter the commercial market until 1902.

Another garage that opened in 1900 was the Motor Vehicle Repair and Storage Co. storage and repair facility at 7 East 28<sup>th</sup> Street, and it offered the highest quality automobile repairs.<sup>11</sup> And, in 1900 the Automobile Exchange and Storage Company opened up a storage and repair facility at 133 – 139 W. 38<sup>th</sup> Street, New York.<sup>12</sup> [Plate 1.4] The Automobile Exchange and Storage Company’s Garage had a sales room where automobiles from various manufacturers were sold. The term garage, which comes from the French word *garer* – to dock, was not popularized until 1902. Thus, garages erected before 1902 were called automobile storage facilities or automobile stables. The garage was linked to the rise of the automobile industry. Its terminology and programmatic features evolved as the automobile evolved.

---

<sup>7</sup> (Fink 1970), 217

<sup>8</sup> (Automobile Storage and Repair Co. 1900)

<sup>9</sup> (Automobile Storage and Repair Co. 1900)

<sup>10</sup> (Steam Vehicle Co. of America 1900)

<sup>11</sup> (Motor Vehicle Repair and Storage Co. 1900)

<sup>12</sup> (Automobile Storage and Repair Co. 1900)

At the same time, automobile owners started to convert their own stables into garages. One of the first stables to be converted to automobile storage was located at 168 – 176 East 75<sup>th</sup> Street, New York. [Plate 1.5, 1.6] In 1902, the five contiguous rowhouses were bought by Edmund C. Stout, of the architecture firm Hill and Stout, from Daniel E. Seybel as a speculative venture. Stout converted the rowhouses to what he called automobile stables. Featuring alternating light red brick and black brick, the façades of the five buildings were treated as one composition with a picturesque roof line. Each unit that comprises the façade is marked by a column of black bricks forming quoins. On the second floor were iron railings below large arched bay windows. On the interior of each unit, the first floor and cellar were used for storage of the cars. There was an elevator in the back to move the automobiles.<sup>13</sup> Apartments were upstairs for the chauffeurs or mechanics and their families. The apartments included a living room, dining room, a small kitchen, and a billiard room. The buildings are still standing today. They are still being used as residential apartments, 168 and 174 East 75<sup>th</sup> Street are the only buildings that still contain a first-story garage.

In some cases, like 213 W. 58<sup>th</sup> Street, New York, a purpose-built private stable constructed in 1900 was immediately converted to automobile storage, and never actually housed a horse.<sup>14</sup> Even though the stables were converted on the interior to hold automobiles instead of horses, the architects still retained their exterior design. Garages erected in 1900 and 1901 used architectural features used in the design of stables for the articulation of facades. This made it almost impossible to mark the differences between stables and garages.

In 1901, a survey conducted by the magazine *Horseless Age* found that there were seven public commercial garages in Manhattan. The latest garage to open in April of 1901 was the Winton Motor Carriage Company on Fifty-Eighth Street near Third Avenue. [Plate 1.7] The Winton Garage boasted a large interior open floor plan measuring 65' by 100' that was unimpeded by posts. The second floor appears to have been suspended from the roof trusses. The second floor mezzanine held the offices and reception rooms, with the rear of the garage sectioned off as a repair shop. The interior space was lit by a large skylight overhead, and it held thirty-three cars. The Winton Motor Carriage Company Garage was constructed using all fireproof materials - concrete flooring system, iron railing, and brick partition walls.

---

<sup>13</sup> (Automobile Stables 1901)

<sup>14</sup> (McDonald 2007)

The facade of the Winton Motor Carriage Company Garage was characterized by large arched doorways for the automobiles to enter and exit. The second story was marked by a set of double hung windows and a secondary door that could be reached via an exterior staircase. The façade was topped by a large pedimented roof line with a central circular window. The Winton Garage's facade design is an example of an early garage's design that used stable design characteristics, making it indistinguishable from stables built at the time.<sup>15</sup>

Early garages were constructed with similar methods as the stables. They were constructed out of materials such as wood, iron, steel, and brick, with ornamentation made from fieldstone, terra cotta, and stucco. Roofs were generally made of fireproof materials such as poured cement, cement tile, and asphalt. On the exterior, the garages used traditional architectural styles like the Winton. In this way early garages were designed to blend into their surroundings - hiding their utilitarian interiors.<sup>16</sup>

However stables and garages differed in their interior. Garages needed to be heated because early car batteries froze easily. A large majority of cars on the road during the early twentieth century were electric cars that needed constant care and charging. Therefore, garages frequently required separate "battery rooms" for the maintenance of batteries.<sup>17</sup> In addition, architects started to experiment with construction methods and to use poured reinforced concrete for interior floor spans. Reinforced concrete, first used in building construction in the United States in 1871, was slow to gain popularity despite its fireproofing qualities and its ability to hold a greater structural load over longer spans. The garage industry was quick to make reinforced concrete its material of choice for garage construction. To reinforce the concrete spans, early builders used cast iron and eventually steel embedded in the concrete to give it greater strength. Concrete was used to create new roof trusses to accommodate the need to have at least fifty foot, uninterrupted spans to accommodate parking below. Early garages also used established forms of construction to support the loads caused by the storage of automobiles like the Pratt truss. Other truss systems were used in garages to suspend floors and carry storage loads, as seen in the Winton Garage.

---

<sup>15</sup> (Storage and Repair Station in New York 1901)

<sup>16</sup> (McDonald 2007), 138

<sup>17</sup> (Way 1919)

In 1902, there were twenty-four garages<sup>18</sup> in Manhattan, accommodating the 23,000 cars that were registered in New York City.<sup>19</sup> This number did not include private stable conversions or private garages. The low number of automobiles in Manhattan was, in part, a result of the lack of storage and repair shops which in turn discouraged the purchase of cars. In addition, purchases of cars were slowed by the array of other transportation services offered in the city. The two most popular forms of transportation at the time were mass transit and the private horse and carriage. The garages that did exist, like the Winton, Auto Exchange, and Auto Storage and Repair Company, were outside the main business center located in downtown Manhattan. In spite of the scarcity of garages or storage places in 1902, New York City was the only city in the United States that had enough parking to accommodate its car population.<sup>20</sup>

These early automobile storage facilities were often conversions of livery stables, carriage shops, roundhouses, bicycle shops, barns, theaters, warehouses, and small factories. Thus, the early names indicating that a building was a garage were stable, hotel, parkway, arcade, and barn. These early garages offered more than just storage; they offered chauffeur quarters, waiting rooms and recreation rooms, car washing and detailing, repair shops, and they served as showrooms and sales offices for the automobile manufacturers. These early garages accommodated long-term storage instead of short-term storage. Only garage owners, cabbies, chauffeurs, mechanics, and car jockeys or attendants were allowed in them and the owners of the cars had very little interaction with the inner working of the garage. They waited in separate front waiting rooms. Some garages even had separate waiting rooms for women and men, with different recreational activities for each while they waited for their cars. Men's waiting rooms were decorated differently from women's waiting rooms with designs that were deemed suitable for their respective gender. Men's waiting rooms usually had a billiard table or card table to occupy their time, while women's waiting rooms were lounges with suitable magazines for them to read.<sup>21</sup>

By 1903, the general population's view of cars started to change from a leisure activity to a viable source of transportation. The car was seen as an environmental savior which was a cleaner, and a safer alternative to the horse. The horse was the leading form of pollution in

---

<sup>18</sup> (Jakle and Sculle 2004), 53

<sup>19</sup> (Fink 1970), 58

<sup>20</sup> (Jakle and Sculle 2004), 115

<sup>21</sup> (McDonald 2007), 27 - 50

Manhattan. In 1900 alone, there were 750,000 horse accidents.<sup>22</sup> In addition, in 1903 for the first time the police were brought in for traffic control. This made it easier and safer for travelers to get around in their automobiles.<sup>23</sup> 1903 also marked the year when the Banker Brothers Company operated the first garage chain in the City of New York. The Banker Brothers Company started off as a distributor for nine different automobile manufacturers setting up combination showroom garages throughout the New York metropolitan area. As of 1903, the Banker Brother stopped offering showrooms as part of their business and their garages just functioned as storage facilities. Therefore, the Banker Brothers are cited as the first company to run a garage chain.<sup>24</sup> 1903 was also the year that the first application for the construction of an “auto house” was filed with the Department of Buildings.<sup>25</sup>

In 1904, garage construction started booming on the west side of Manhattan, along Broadway in Midtown, and in the Upper West Side. Early car companies such as Ford, Buick, Winton, Mercedes Benz, Packard, B.F. Goodrich, and Peerless Motor Car started buying up land, and making plans for new showroom garage combination buildings along Broadway between 42<sup>nd</sup> Street and 72<sup>nd</sup> Street. This created what would later be known as “Automobile Row”<sup>26</sup>. The west side was becoming a center for automobile sales and storage.

At the same time, other automobile storage companies were converting warehouses, factories, and old tenements into garages. A later example of this conversion process occurred at 411 West 55<sup>th</sup> Street, which was built as a loft in 1908 and then converted to a garage in 1911. The interior of these structures were ripped out in order to insert fireproof construction materials, as well as gasoline tanks and pumps.<sup>27</sup>

Wealthy businessmen like Andrew Carnegie constructed their own garages. The Carnegie garage, like the Winton garage, used private stable design features. Private stables were usually two to three stories tall with places for storage on the ground floor, and living quarters for chauffeurs on the upper floors. Andrew Carnegie’s garage, at 55 East 90<sup>th</sup> Street [Plate 1.8], had the first floor assigned to electric automobile storage. Toward the front of the garage, there was a drain for washing his cars, and a telephone room for the Carnegie household to phone the

---

<sup>22</sup> (McDonald 2007), 9

<sup>23</sup> (Jakle and Sculle 2004), 12

<sup>24</sup> (Jakle and Sculle 2004), 115

<sup>25</sup> (Dolkart, *The Acton Garage, Now the Monterey Garage: A Preliminary Investigation of Its History and Architecture* 2002)

<sup>26</sup> (C. Gray, *Automobile Row: The Car Is Still King on 11th Avenue* 2006)

<sup>27</sup> (DOB Building Information Search 2013)

chauffeur upstairs to get his car ready. In the back was a charging room for the cars and a bathroom. The second floor was split into a living quarter for the chauffeur toward the front, and more storage for automobiles in the rear that would be brought up by an elevator. Separating these two spaces was a set of skylights to provide ample light to the ground floor and the car storage space was accessible from the chauffeur's quarters through a metal catwalk crossing over the skylight.<sup>28</sup>

1905 saw the continued growth of the garage and car industry. With the increase in car production, companies such as the Manhattan Automobile Company, Banker Brothers Company, Wanamakers, Locomobile and Steam Vehicle Company of America, Motor Vehicle Storage and Repair Company, Homan and Schultz, Automobile Storage and Repair Company took advantage of the business opportunity.<sup>29</sup> They developed chains of auto storage and repair facilities across the city. Emerging as leaders in the auto industry, these companies' "automobile stations"<sup>30</sup> were more than just storage facilities. They had a repair shop, gas station, and sometimes even a paint shop or salesroom. In this way, these companies could have repeat business and maintain economic security to cover all overhead costs. These included costs for the land, the building design and construction, general maintenance that included heating, lighting, and elevator operation, general operating expenses, and insurance. The insurance rate on a garage was higher than on a stable, due to the increased fire hazards of garages caused by oil, gas, and electrical charging units.

A decrease in the erection of private garages and an increase in the construction of commercial garages also happened in 1905. It was easier to rent in a garage, and pay fifteen to twenty dollars a month for storage, than to pay the insurance rates and maintenance costs of building one's own private garage. 1905 was also the year when traffic laws began to be developed. For the first time, the courts ruled on the ability of the local government to regulate street traffic. The Maryland Court of Appeals ruled, "The primary purpose of a street is for passage and travel, and ... unauthorized and illegal obstruction to free use come within the legal notion of nuisance."<sup>31</sup> This ruling made it clear that the streets are for traffic and transportation and not for parking, stating that local governments have every right to ban street side parking in

---

<sup>28</sup> (Cornstock 1911), 49, 52

<sup>29</sup> (Fink 1970), 58

<sup>30</sup> (Growth of the Garage Business 1905)

<sup>31</sup> (Jakle and Sculle 2004), 28

order to lessen traffic problems. The Manhattan Department of Planning used the legal precedent set by Maryland, and initiated a ban on curbside parking, enacted safety zones around fire hydrants and loading zones, and enacted street cleaning and snow removal rules. In addition, the Manhattan Department of Planning enacted the blanket rule that there could be no street parking if it covered more than forty-five percent of the traffic capacity of the block. All these rules were initiated to ease traffic congestion. They also had an important side effect, which was to increase the need for off-street parking and the need for garages.<sup>32</sup>

By 1906, there were eighty<sup>33</sup> commercial garages operating in Manhattan. The increase in the number of garages caused New York City's Department of Buildings to initiate the first garage regulation measures. Under the new regulation, garages fell under the administration of the Bureau of Combustibles. At this point, owners were required to get a license from the New York Fire Commissioner to erect a garage. Other rules stipulated that garages were not to be part of dwellings, hospitals, theatres, churches, schools or tenements. The only exception to this rule was that they could be part of private residences. In addition, garages could not have more than 10 gallons of flammable liquid within their structure, which had to be enclosed in a ventilated closet and preferably underground. The electric lights and sockets had to be raised off the ground and in protective metal casings.

Due to these regulations, insurance rates increased for garages that stored gasoline. As a result, it was becoming increasingly hard to get permission to store gasoline.<sup>34</sup> Due to these restrictions, most garages started to pull out of the gasoline storage and distribution business and the gas station emerged as its own typology. The gas station was made possible in 1905 by the invention of the safety gas pump by C.H. Laessig, of the Automobile Gasoline Company of St. Louis. Laessig took an old water heater, turned it upside down, and added a garden hose with a faucet to dispense the gas. When the gas was dispensed, it was measured by a gauge attached to the pump. Prior to Laessig's gas pump, gasoline disbursement was inaccurate and dangerous. Earlier gas pumps had no way of measuring how much gas was dispensed. Attendants had to listen to the amount being transferred to estimate when the tank was full. They would literally put their ear to the tank of the car. This method caused gas spills, and made it almost impossible

---

<sup>32</sup> (Jakle and Sculle 2004), 20

<sup>33</sup> (Fink 1970), 58

<sup>34</sup> (The Horseless Age 1906)



to charge accurate prices for gas. The Laessig gas pump made it safer and easier to dispense gas, and to build gas stations as separate businesses apart from the garage.<sup>35</sup>

The standardization of garage construction began in 1906. Requirements that are listed above ensured that garages had the best fire protection available, which helped give them the lowest insurance rate possible. The new regulations made it harder to convert old buildings to meet the required lighting, ventilation, drainage, and fireproof standards and this caused new construction to take off. Magazines like the *Horseless Age* started publishing articles about the ideal garage, and how to properly maintain garages. The articles talked about fireproof construction methods and the typical requirements for a garage. The principles discussed included letting in natural light by having large windows and skylights, and having sloped floors for drainage. It was recommended to have steel truss construction to open up long interior spaces, ventilation, and direct connections from the drain to the sewers.

The articles expounded on the need to introduce turntables, rotating platforms, to allow for the maximum amount of parking spaces, auto pits with the model size being 4' by 8' by 4' deep to make it easier to do repairs, gas storage going underground, washing decks on each floor, lounging rooms with the latest auto trade papers for clients, doors that open to the outside, and the need for garages to have their own “trouble wagon”<sup>36</sup> to help their clients when their cars broke down. When it comes to maintenance of these early garages, the articles stressed fire protection through placing galvanized iron pans under each car to catch oil leaks, using proper construction materials, and having washing stations on each floor.

The *Horseless Age* and *Automotive Industries* magazine cited the Decauville Garage at 56<sup>th</sup> Street and Broadway as an example for all other garages to follow in New York. [Plate 1.9] When it was constructed in 1906, it was the largest and best garage in America. Built of steel and concrete, making it fully fireproof, it stood at two stories tall with a basement. The first floor was used for storage, and the second floor for repairs and offices. The garage had high ceilings and large open floors that followed the popular parking layout with the cars lined up against the exterior walls. This left the garage’s center for a turntable, and an elevator with an automatic stop at each floor. It was lit by large skylights. The garage held three hundred and fifty vehicles, and was operated by chauffeurs. Each chauffeur had his own mailbox. There was a large chauffeur

---

<sup>35</sup> (Vieyra 1979)

<sup>36</sup> (The Horseless Age 1906)

lounge and telephone box so they could get the car ready for their owner. The garage operated like a factory, with the chauffeurs, mechanics, and other employees punching in and out on time cards. They followed predefined work schedules to keep the cars maintained and clean.<sup>37</sup>

Other garages erected during this time were 177 E. 73<sup>rd</sup> Street, The Apthorp Motor Car Co. Garage at 214 W. 80<sup>th</sup> Street, [Plate 1.10] and The Acton Garage at 137 W. 89<sup>th</sup> Street. The Acton Garage [Plate 1.11], designed by L.A. Goldstone, was constructed to meet every requirement of the New York Board of Fire Underwriters, the Insurance Exchange, and the Bureau of Buildings. The Acton Garage was the first garage to install a separate vent shaft for each floor as a form of fire protection.<sup>38</sup> All of the garages erected during this time period contained the latest in technological advancements, including the Otis safety elevators, RLM fixtures which had a single light bulb with a porcelain reflector, intercoms, ticket spitters or ticket machines to provided ticket to customers, and turntables.<sup>39</sup>

By the end of 1906, there were over 100,000 cars registered in Manhattan.<sup>40</sup> The groundwork for creating a business that could store and maintain cars was there. Guidelines and construction methods had been hammered out through trial and error, and the garage industry was making its mark on Manhattan's transportation landscape.

## **1907 – 1910: Development of the Automobile Industry and Garage**

After 1906, the auto industry increased production. This caused a shift in the garage industry. Before 1906, garages had multiple programming requirements. The earliest garages contained repair shops, showrooms, and gas stations. Starting in 1907, garages shifted their programming from repairs and sales to storage. Car manufacturing was becoming standardized. The cars being produced were in better condition, which brought about fewer repairs and less need for constant maintenance to keep them running. In addition, garage owners started to unify by developing price standards for gas and storage. This allowed garage owners to set their prices at accurate rates, which helped them gain reasonable profits.<sup>41</sup>

Some garage owners sought to achieve economic stability through the introduction of the cooperative run garage. An example of this type of garage was the Automobile Club of America

---

<sup>37</sup> (Decauville Garage 1906)

<sup>38</sup> (Cornstock 1911), 80

<sup>39</sup> (McDonald 2007), 108

<sup>40</sup> (Fink 1970), 58

<sup>41</sup> (McDonald 2007), 13

Garage [Plate 1.12], built in 1907 and designed by Ernest Flagg. The Automobile Club of America Garage was run by the club members who consisted of businessmen from all trades - including the automobile trade. The garage included space for live and dead storage, or active and non-active storage, along with recreational areas and meeting rooms for the club members. Instead of paying a monthly fee for the garage, the members paid club fees that in return gave them access to the garage. The members of the Automobile Club of America also formed one of the first garage industry organizations, and set fixed rates for storage for garages owned by club members.<sup>42</sup>

Garage owners sought to replace the lack of income coming in from repairs and sales. Many of them started adding taxi services. As of 1907, there were five thousand taxis in Manhattan. One such garage was the Cedarhurst Motor Livery Company Garage at 147 West 83<sup>rd</sup> Street. In 1908, the Cedarhurst Garage entered a partnership with Frayer-Miller Cabs in order to operate a taxi-cab service. The Cedarhurst Garage was purely a private enterprise, which at that time meant that it could only do business with people who called ahead for a taxi. It could not pick up people at a taxi stand. It ran twenty-five state-of-the-art taxi-cabs for its private clientele. By charging the standard fare of fifty cents a mile, the Cedarhurst Garage was able to supplement its income from car storage.<sup>43</sup> [Plate 1.13]

Massive development in the auto industry also took place in 1908, when Ford perfected the Model-T Ford car, and began its production.<sup>44</sup> This affordable car, originally priced at eight hundred and fifty dollars, allowed the general public to own vehicles for the first time. With the streamlining of the auto industry as of 1908, there were 198,000 cars registered in Manhattan alone. Manhattan's Department of Planning started to develop more traffic laws. The police commissioner, Theodore Bingham, defined and enforced traffic regulations for the first time and he erected the first stop signs all over Manhattan. He enacted driving rules such as keeping to the right when driving and passing on the left.<sup>45</sup>

At the same time, the metropolitan area began supporting new infrastructure to accommodate the growing auto industry. New York State's Department of Transportation began constructing its first parkway system to ease traffic within the city and to provide a scenic way

---

<sup>42</sup> (Fink 1970), 217

<sup>43</sup> (Another New York Taxicab Enterprise 1908)

<sup>44</sup> (McDonald 2007), 8

<sup>45</sup> (The City Record 1906)

into, out of, and around Manhattan. The construction of the highway provided commuters traveling extended distances within the city with an alternative route to get to their destination. This cleared up some of the congestion in the inner city blocks. The roads being constructed were a series of then high speed, 25 miles per hour, four-lane roads. The Bronx River Parkway, running parallel to the Bronx River, was the first section of the planned system when it opened in 1908.<sup>46</sup>

In 1909, larger garages started to be erected to meet the increasing demands. One such example is the New York Taxicab Company Garage on West 57<sup>th</sup> Street between 11<sup>th</sup> and 12<sup>th</sup> Avenue. [Plate 1.14] When it was built in 1909, it was the largest garage in the United States. It was the first ramp garage constructed in Manhattan. The garage, designed by F.M. Andrews & Co., was a simple brick structure, four stories tall with a basement. The garage measured two hundred and twenty-five feet long by one hundred and forty-five feet deep. It featured a ramp system that ran through the four stories. It had washing platforms, a repair shop, and fireproof bays that created smaller units to make sure that if a fire broke out it would be contained. With a capacity of seven hundred cars, the Taxicab Company garage's real innovation was in its use of rolled steel beams used for the first time for a span of forty feet.<sup>47</sup>

While the West Side had been the primary location for garages from 1900 to 1906, with the opening of the Queensboro Bridge in 1909, many more commercial garages were being erected on the East Side. This switch in focus came from the amount of commuters now coming in from the East to work in the factories and businesses located on the East Side and Midtown. The East Side was becoming a hub for commercial garages, while retaining its role as the prime location for private garages.

By 1910, there was over 468,000 cars registered in Manhattan, triple the amount of cars registered in 1908.<sup>48</sup> The huge increase came from both the streamlined manufacturing process, and the fact that as of 1910 it became cheaper to drive an automobile than a horse and buggy. A horse and buggy cost 2.5 cents per mile per passenger, while a car cost 1.8 cents per mile per passenger.<sup>49</sup> With the increasing amount of cars, there was not enough parking anywhere in Manhattan. Urban planner Raymond Unwin calculated that if a tenth of a day's population of the

---

<sup>46</sup> (Eisenstadt and Moss 2005)

<sup>47</sup> (Cornstock 1911), 86-89

<sup>48</sup> (Fink 1970), 58

<sup>49</sup> (McDonald 2007), 9

Woolworth Building decided to bring their cars to work and park at curbside, the line of cars would extend for one and one quarter miles down both sides of Broadway. To help relieve traffic, the Manhattan Department of Planning started implementing street widening projects and curb cutbacks, as well as the rounding off of corners so turns would be easier and safer. In addition, curbside parking was permitted for the first time.<sup>50</sup>

Garage owners responded to the growing usage of cars by forming the New York Automobile Trade Association. The Association set guidelines, regulations, and fees for garages in Manhattan. In addition, the Association held design competitions advertised in design magazines such as the *Brickbuilder*, *The American Architect*, and *Architectural Review*.<sup>51</sup>

Garage construction increased further. For the first time, the business of automobile storage was viewed as legitimate industry. Extending across Manhattan, the number of garages expanded thanks to better and more affordable cars and new government supported infrastructure projects. Adapting to the new conditions, the garages built during this period were larger than the garages erected from 1900 to 1906.

## **1911 – 1916: The Garage becomes Widespread**

In the following years, between 1910 and 1916, production of cars skyrocketed. The car was fully integrated into the culture. By 1912, the amount of cars registered in Manhattan totaled nine hundred and forty thousand - almost double what it was in 1910.<sup>52</sup> The increase in sales was fuelled by a new demand for cars from a public that could now afford them. Car prices came down dramatically due to assembly line production. Companies that made car accessories and parts were becoming more successful and staying in business longer. Before this time, car manufacturing companies had a business lifespan of about seven years. New car manufacturing companies started to emerge for the single purpose of fabricating interchangeable car parts that could be used on multiple car models. Leading industry forces were Goodyear Tires, Peerless Motor Car Company, the U.S. Rubber Company, and Ford Motor Company.<sup>53</sup>

Another lesser-known company emerging during this time was the Ardsley Motor Car Company. Ardsley specialized in manufacturing car parts that could be used on multiple car

---

<sup>50</sup> (Jakle and Sculle 2004), 24

<sup>51</sup> (McDonald 2007), 22

<sup>52</sup> (Fink 1970), 58

<sup>53</sup> (A.T. Demarest & Company 2000)

models. Located in Yonkers, New York, Ardsley built and opened its garage and repair shop at 165 East 77<sup>th</sup> Street. Hiring the prolific New York architect George F. Pelham, Ardsley erected a five story brick and terracotta fireproof garage. With large glazed façade bays and geometric ornamentation, 165 East 77<sup>th</sup> Street is one of the first garages to use a modern style to express its modern program.<sup>54</sup> [Plate 1.15]

1914 was the year that The New York Department of Buildings adopted a new code regulating garage construction. The new code, offering one of the first definitions of what a garage is, defined a garage as “a building wherein are kept more than three automobiles or motor cars charged with or containing a volatile inflammable liquid for fuel or power.”<sup>55</sup> In addition, the code set a standard for fireproofing. All flooring and ceiling systems had to be constructed by using at least a three inch thick concrete slab, ceilings were to be covered preferably in metal lath and or hard plaster, stairways and elevators had to be enclosed, and doorways had to be fitted with iron frames. In addition, there had to be at least two automatic fire doors in every garage, windows could only be glazed with wire glass, and every garage had to be fitted with a sprinkler system. The code mandated that any existing garage that did not meet these standards in fireproof construction had to be altered to meet the new standards.

The new code standardized and streamlined the garage construction process. The combination of the new building code and the increasing demand for garages led to the modernization and simplification of the garage designs. Moving away from purely classical models, garages expressed new features emphasizing elevator shafts, and using numerous large windows. These new attributes can be seen on garages like 528 West 162nd Street, erected in 1914, and 4162 Broadway, erected in 1915.<sup>56</sup> [See Survey page 46, 47] Using a limited range of materials with minimal ornamentation, the construction process was speeded up - allowing for more garages to be built faster.

By 1915, there were six hundred businesses in Manhattan that identified themselves as car storage facilities.<sup>57</sup> Along with the changes in design, the garage industry started to change. An increasing number of owners started promoting short-term parking over long-term parking. Previously, parking was long-term because people needed to store cars in the winter, could not

---

<sup>54</sup> (New Public Garages 1913)

<sup>55</sup> (Jakle and Sculle 2004), 25

<sup>56</sup> (DOB Building Information Search 2013)

<sup>57</sup> (McDonald 2007), 18

drive them in the bad weather, and driving was still a luxury for most people. As cars became more durable, more people started using them as the main form of transportation to get anywhere. This caused garage owners to switch to offering more short-term parking options. To further reinforce this trend, insurance companies were offering lower rates to short-term parking facilities than to long-term parking facilities.<sup>58</sup>

In 1916, New York City's Department of Planning passed a new zoning resolution. The 1916 zoning resolution regulated where garages could be erected in the city. The zoning resolution prohibited garages with more than five cars to be built in residential districts, mandated that garages could not be placed within four hundred feet of schools and hospitals, and ensured that garage construction would be limited to commercial and manufacturing districts.<sup>59</sup>

New maps were drawn up by the Board of Estimate and Apportionment that outlined the future height and use of all buildings erected after 1916 in New York City. In the Upper West Side, the commercial districts fell on Broadway and on 108<sup>th</sup> Street and 107<sup>th</sup> Street between Broadway and Columbus. In Morningside Heights, everything above Manhattan Avenue was unrestricted and open for development. In Harlem, the area was mostly business and manufacturing oriented, with small residential pockets. Midtown was largely zoned for business, and it was unrestricted for development. It had a residential pocket near Central Park. The East Side was zoned for unrestricted use on the river's edge, and for business purposes from Lexington Avenue over to the river.<sup>60</sup> These zones overlaid where most garages were already built. The 1916 zoning resolution enforced pre-existing pockets of areas designated for parking and garages, like East 73<sup>rd</sup> Street between Lexington Avenue and Third Avenue. It also set up pockets like East 64<sup>th</sup> Street between Second Avenue and First Avenue because it limited where garages could be built. [Plate 1.16]

Beyond the 1916 zoning regulation, the American Concrete Institute developed the first standard plan for the construction and maintenance of Portland Cement in garages and industrial buildings. The maintenance plan included how to deal with potholes, delamination, corrosion of embedded reinforcement, slab cracking, leaking, scaling or surface disintegration, cracking, torsion caused by unanticipated bearing conditions and unanticipated volume change forces.<sup>61</sup> It

---

<sup>58</sup> (Jakle and Sculle 2004), 47

<sup>59</sup> (Building Zone Resolution 1916)

<sup>60</sup> (Building Zone Resolution 1916)

<sup>61</sup> (Design of Concrete Parking Structures: Problems and Solutions 1986)

was also the year that the Portland Cement Company produced its first pamphlet on garage construction and layout, “*Concrete for Industrial Buildings and Garages*”. The Portland Cement Company was not the only one that produced a publication about the layout of garages. The magazine *The Horseless Age* devoted an entire edition to garage designs and layouts, [Plate 1.17] developing the first plans for architects to follow when designing a garage. The layouts included everything from irregular shaped lots to one story and three story garage plans. These plans aided in the standardization of the garage.

With the age of the automobile on the horizon, the years 1910 to 1916 were when the garage was standardized and widely built. The increased production and expansion of car manufacturers, the 1914 building code, 1916 zoning resolution, the new standards set by the concrete industry, and the publication of designs in magazines all aided in the standardization of garages. As a result, by the end of 1916 there was an increased building of garages, keeping up with the increasing development of the car industry.

### **1917 – 1930: The Age of the Automobile**

By 1917, there were officially no more carriage houses or horse drawn carriages in Manhattan.<sup>62</sup> All the stables had either been demolished or converted by gutting the interior and then converting them into working garages or for other purposes. New York had become a center for automobile manufacturing, sales, and distribution. As of 1917, Queens had thirteen auto plants for manufacturing, assembly, and service; and twenty-nine automobile accessory part factories. Car manufacturing companies lined Broadway in upper Midtown in what is today known as “Automobile Row.” The completion of this period’s “Automobile Row” occurred in 1917, when the Ford Motor Company was one of the last companies to build a showroom garage combination, designed by Albert Kahn, in this area at 1710 Broadway. [Plate 1.18] “A solid line of motor vehicle signs”<sup>63</sup> from 42<sup>nd</sup> Street to 72<sup>nd</sup> Street on Broadway, “Automobile Row”<sup>64</sup> was a testament to New York’s role as a powerhouse in the automobile trade.

In 1918, the New York Bureau of Municipal Information conducted a traffic survey. It made recommendations to the Manhattan Planning Department to have more garages in areas of large traffic. Previously, garages could not be erected in communities with schools and hospitals,

---

<sup>62</sup> (Jackson 210)

<sup>63</sup> (A.T. Demarest & Company 2000)

<sup>64</sup> (A.T. Demarest & Company 2000)



even if they were highly trafficked areas. The Bureau recommended overturning this law, which was part of the 1916 zoning resolution. A variance was put into the 1916 zoning law, which allowed garages to be constructed near schools and hospitals. This led the way for garages like 3-17 East 102<sup>nd</sup> Street to be built. 3-17 East 102<sup>nd</sup> Street is a four-story ramp garage designed by Emery Roth in 1924. The garage was erected for the purpose of being an automobile service, garage and repair building for the area around Mount Sinai Hospital.<sup>65</sup>[See Survey Page 61]

In addition, the Bureau recommended instituting traffic lights to ease traffic congestion.<sup>66</sup> The traffic light was invented in 1914. It had been installed in other cities such as Detroit and Los Angeles before 1918. As a result of the Bureau's recommendations, the first traffic light was installed on Fifth Avenue in 1919.<sup>67</sup>

The garage industry evolved even further in the 1920s. As gas prices increased in 1920, garages completely pulled out of the gas business. This made it necessary for gas stations to open up in and around Manhattan. The garage had evolved into a specific type that emphasized the programs of storage and repair. 1920 was the year when self-parking was introduced – particularly in garages outside of Manhattan. Before 1920, only mechanics, chauffeurs, owners, cabbies, and car jockeys or attendants were allowed in garages. This switch in how garages were run changed the industry throughout the nation, but had a limited impact in New York, where self-parking never became prominent.

In most other cities, the push was to make garages more accessible and safer places for use by everybody. Designs switched from elevators to ramp designs. More lighting was put in for the nighttime customers, and pedestrian paths were added. Manhattan did not go along with this trend due to its high density, high cost of land, and small sites.<sup>68</sup> It was one of the few cities to stick to the historic garage layouts, utilizing an elevator and not having self-parking except for rare instances. Instead, New York developed the underground garage with other uses for the building above ground. The first underground garage was erected in Manhattan in 1920.<sup>69</sup>

The 1920s also saw the evolution of garage signage. Since their erection in the early 1900s, commercial garages displayed large electrified signs as forms of advertising. These early signs were simple signboards lit with incandescent bulbs held in an encased fixture. In 1923,

---

<sup>65</sup> (Roth 1924)

<sup>66</sup> (McDonald 2007), 216

<sup>67</sup> (Jakle and Sculle 2004), 43

<sup>68</sup> (McDonald 2007), 102

<sup>69</sup> (McDonald 2007), 163

neon entered the commercial market in New York and started to replace the electrified bulb sign. The first company to purchase the neon sign was the Packard auto dealership. [Plate 1.19] In 1924, companies like Claude Neon Lights Inc. and Rainbow Lights Inc. of New York set up shop and started lighting up the city. Neon needs less energy than the signs lit by incandescent bulbs, therefore lowering the cost of lighting the sign. Many businesses, including the garage industry, started retrofitting their signs with neon tubes by the late 1920s. In a survey taken in 1927 by New York Edison, there were nearly a thousand “auto and garage” displays in Manhattan.<sup>70</sup> The auto industry helped popularize the neon sign, and by 1928 the incandescent lit signs had lost favor.

In the mid 1920s, for the first time, the New York City’s Department of Buildings started to get involved in garage projects. It erected some of the first municipal parking garages. In addition, the New York City’s Department of Transportation took over new traffic relief initiatives.<sup>71</sup> By 1924, fifty traffic lights were installed all over Manhattan, with seven along Fifth Avenue. These traffic lights were all electrically run, unlike the first traffic lights that were operated manually.<sup>72</sup>

As technology evolved, like in the case of improvements in the traffic light, so did the garage. The first fully mechanized garage was erected in Manhattan in 1928. The Kent Automatic Parking Garage [Plate 1.20] was composed of a three elevator system and stood twenty-eight stories tall. The garage, which was designed by Jardine, Hill & Murdock, held up to 1,050 cars. The mechanized garage allowed for more floor space in order to store additional cars. It was safer for drivers and vehicles alike. Less people were needed to run the garage. This made it less expensive to run, which was a huge advantage due to the declining economic atmosphere brought about by the Stock Market crash of 1929.<sup>73</sup> Unfortunately, the Kent Garage Investing Corporation, which founded the Kent Automatic Parking Garage, declared bankruptcy in 1931. The company was reorganized without the Kent brothers. The mechanized elevator system was designed specifically for smaller pre-war cars. As cars got larger, the mechanized system became obsolete. In 1943, the Central Saving Bank was the holder of the mortgage. They sold the building to the Sophia brothers, who converted the building into a warehouse.

---

<sup>70</sup> (Rinaldi 2013), 20

<sup>71</sup> (Jakle and Sculle 2004), 48

<sup>72</sup> (Old New York in Photos #19 n.d.)

<sup>73</sup> (Kent Automatic Parking Garage 1993)

In the late 1920s, garages started to partner with other businesses to supplement the cost of erecting the building. One example occurred in 1929 when the Alan Garage at 152 East 87<sup>th</sup> Street [Plate 1.21] was erected as part of an entertainment district development. The garage was erected alongside a hotel and movie theatre. This package was put together because the Alan Garage was met with considerable opposition. Zoning laws did not permit garages on the street. The owners went to the Board of Standards and Appeals, and they appealed for an exemption for 87<sup>th</sup> Street. The Board compromised by requiring that the "front elevation shall be designed in attractive architectural treatment . . . with face brick and architectural terra cotta." In addition, it had to have limited signage. Frank J. Schefcik was the final designer on the project. His garage had white stripes running up the façade, with floral ornament in yellow and green - all of glazed terracotta. Auto tires appear in terracotta at the top floor. This was an auto substitute for the projecting horse's head often used on stable buildings. In addition, terracotta red letters were written in relief on the ground floor. It was named the "The Alan Garage" for its owner, Alan Ornstein.<sup>74</sup>

By 1930, supplementing the stand-alone garage within buildings used for other purposes was no longer a viable option. The economic distress caused by the Great Depression halted construction projects across the nation. Beyond the lack of funds for construction purposes, new zoning regulations started to require a certain number of parking spaces per building type. Developers started to combine the garage into their building by putting it underground. This was financially advisable because it provided supplemental income for both buildings and garages.

1930 was a year when yet again there was a shift in the perception of garages. This time, people were beginning to view the garage more for its functionality and practicality, with less emphasis on its visual appeal and integration into the urban fabric. This change further reinforced the idea of incorporating the garage into office buildings and apartment complexes. With this change of perception, the end had come for the early purpose built, urban garage in Manhattan.

---

<sup>74</sup> (C. Gray, *Streetscapes: Alan Garage-Franklin Hotel; Unusual Combination for Conflict* 1989)



**Plate 1.1:** 201 West 75<sup>th</sup> Street, NY; New York Cab Company Stable designed by C. Abbott French & Company in 1988

Photograph By: Hilary Grossman, 2013

**AUTOMOBILES**  
 Steam, Gasoline and Electric  
**BOUGHT, SOLD, EXCHANGED**  
**STORED AND REPAIRED : :**  
 Accessories of all kinds furnished. Expert repairmen constantly on duty. Bargains in slightly used automobiles, steam, gasoline and electric, constantly on hand  
**MANUFACTURERS' AGENTS**  
 For the sale of all makes of Automobiles  
**Automobile Exchange and Storage Company**  
 133, 135, 137 & 139 West 38th St., N. Y.  
 Two doors from Broadway  
 Temporary Offices, 235 Broadway

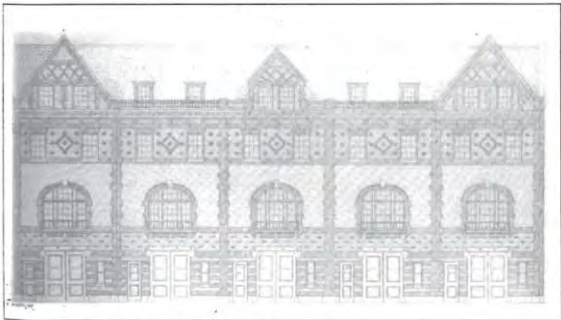
**Plate 1.4:** Garage Advertisement, 1900

Ad: *The Horseless Age*, April 4, 1900

**The Horseless Stable.**  
**AUTOMOBILE STORAGE & REPAIR CO.,**  
 Station No. 1, 57 West 66th Street,  
 (St. Nicholas Rink Building.)  
**NEW YORK.**  
 House and Care for Automobiles of all kinds.  
 Storage Batteries Charged and Supplies of all kinds furnished.  
**TRANSIENTS ACCOMMODATED.**

**Plate 1.2:** Garage Advertisement, 1900

Ad: *The Horseless Age*, April 4, 1900



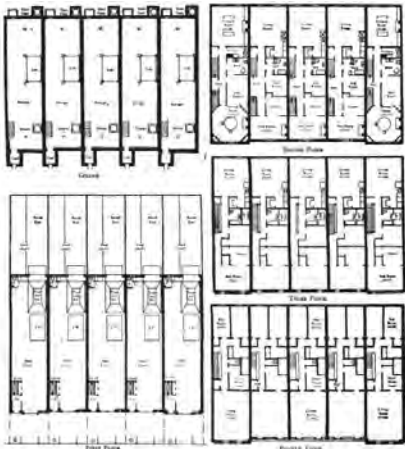
**Plate 1.5:** 168 – 176 East 75<sup>th</sup> Street, NY; Designed by Hill & Stout in 1902

Picture: *The Horseless Age*, Vol. 9 No. 8, 1902

**AUTOMOBILE STORAGE.**  
 160 West 56th Street, New York.  
 Automobiles stored, cleaned, charged and lighted.  
 Moderate rates. Best attention.  
**The Steam Vehicle Co. of America.**

**Plate 1.3:** Garage Advertisement, 1900

Ad: *The Horseless Age*, November 28, 1900



**Plate 1.6:** 168 – 176 East 75<sup>th</sup> Street, NY; Floor Plans

Picture: *The Horseless Age*, Vol. 9 No. 5, 1902





**Plate 1.7:** Winton Motor Carriage Company on 58<sup>th</sup> Street in New York City

Picture: *The Horseless Age*, Vol. 8 No. 4, 1901



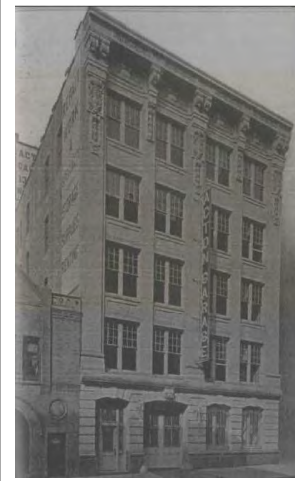
**Plate 3.12:**  
214 West 80<sup>th</sup>  
Street, NY  
the Apthorp  
Garage;  
designed by  
C.B. Brun in  
1906

Picture: *The Parking Garage: Design and Evolution of a Modern Urban Form*, pg 103 (1913)



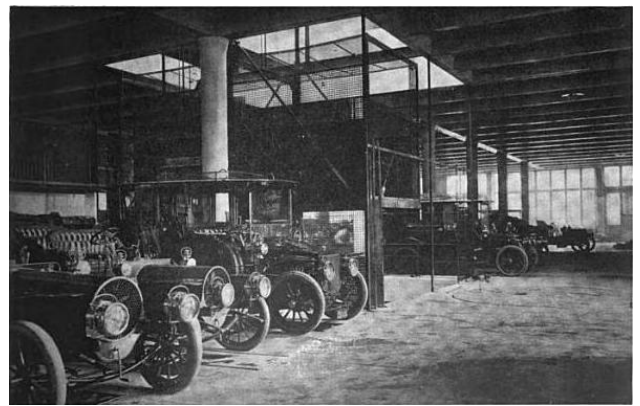
**Plate 1.8:** 55 East 90<sup>th</sup> Street,  
NY the Carnegie Garage;  
designed by Whitfield and King  
in 1904

Picture: *Garages and Motor Boat Houses*,  
1911, pg 52



**Plate 1.11:** Acton  
Garage at 137 W. 89<sup>th</sup>  
Street; designed by  
Lafayette Goldstone in  
1906

Picture: *Garages and Motor  
Boat Houses*, 1911, pg 77



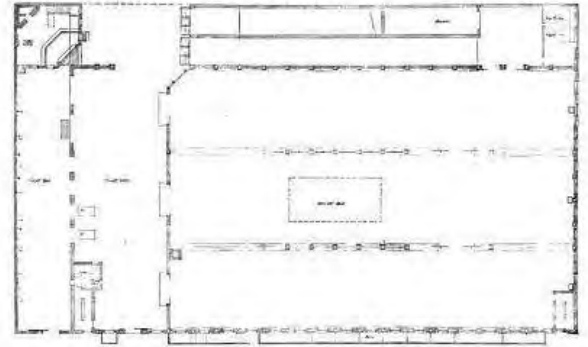
**Plate 1.9:** Decauville Garage at 56<sup>th</sup> Street and Broadway, designed in 1906 (Exterior and Interior Photos)

Picture: *Automotive Industries*, May 8, 1906



**Plate 1.12:** Automobile Club of America Garage, designed by Ernest Flagg in 1907

Picture: *America Adopts the Automobile: 1895 – 1910*; pg 147



**Plate 1.14:** New York Taxicab Garage Ground Floor Plan at 622 W. 57th Street

Picture: *Garages and Motor Boat Houses*, 1911, pg 87



**Plate 1.13:** Cedarhurst Motor Livery Garage at 147 W. 83rd Street, 2013

Photograph By: Hilary Grossman, 2013

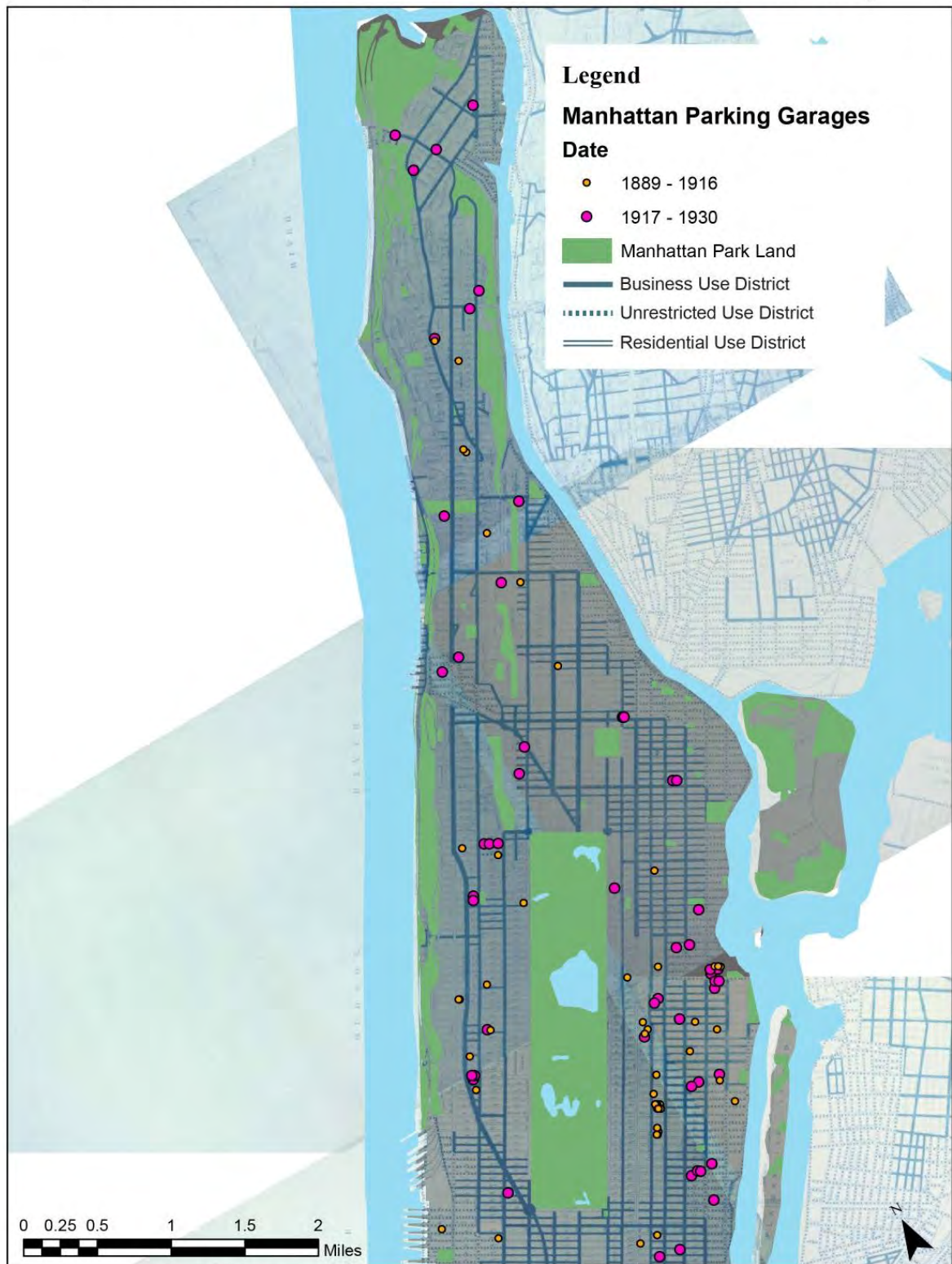


**Plate 1.15:** 165 East 77th Street, New York; designed by George F. Pelhem in 1913

Photograph By: Hilary Grossman, 2013

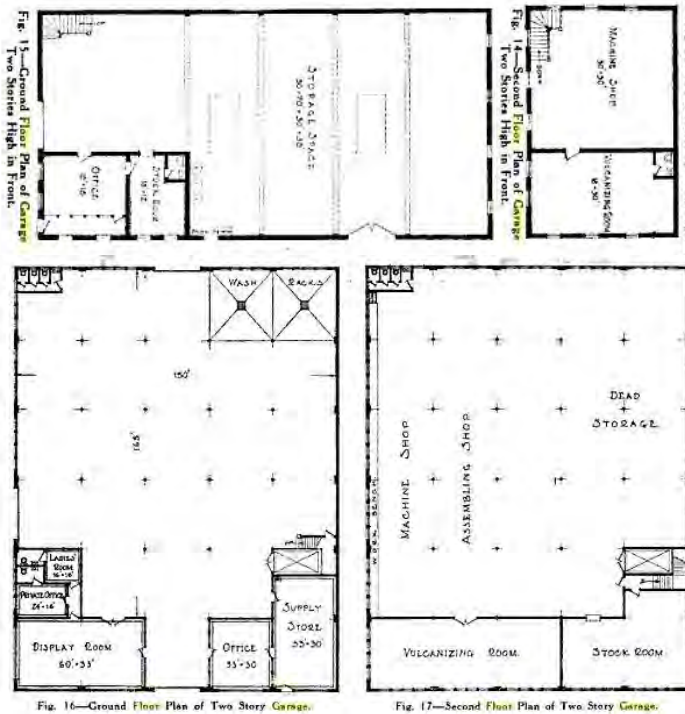


# Post 1916 Zoning Manhattan Parking Garages (Erected between 1900 and 1930 that still exist in 2013)



Data Sources: New York City Department of Buildings, and the 1916 Zoning Use Map Courtesy of the NYPL  
Base Map: NYC Department of City Planning, 2010, Map by: Hilary Grossman

**Plate 1.16:** 1916 Use Zoning Map



**Plate 1.17:** *The Horseless Age* Published Garage Plans in 1915

Pictures: *The Horseless Age* "The Garage Business", November 1, 1915



**Plate 1.20:** Kent Automatic Parking Garage at 34 W. 61st Street, NY designed by Hill and Murdock in 1929

Picture: *The New York Times*, Courtesy of the Office for Metropolitan History, 1936



**Plate 1.18:** Ford Building at 1710 Broadway, designed by Albert Kahn in 1917

Picture: *The New York Times*, Courtesy of Fellman Photo Service 1946



**Plate 1.19:** Packard Dealership Neon Sign in 1923

Picture: Rinaldi, *New York Neon*, Page 19



**Plate 1.21:** Alan Garage at 152 East 87th Street; designed by J.H. Galloway in 1929

Picture: *The New York Times*, Courtesy of Jerome Weinstein, 1930



## **Chapter Two: Survey**

### **Introduction:**

In order to study the development of the garage in Manhattan, I conducted a survey of the remaining garage structures erected from 1900 to 1930. The survey covers an area from 50<sup>th</sup> Street up to the northern tip of Manhattan. It builds on a previous survey conducted as part of another Columbia Historic Preservation Master's Thesis<sup>75</sup>. The present survey looks at garages that still function as garages today, as well as garages that have been converted to commercial or residential uses. The garages have been identified from Sanborn Insurance Maps, newspaper articles, and the Manhattan Department of Building's Database.

The garages being surveyed fit into four different formal façade schemes – low to medium-rise tripartite without the elevator expressed, medium to high-rise multi-bay without the elevator expressed, medium to high-rise multi-bay with elevator expressed, and one to two-story. The garages have been designed in different architectural styles. The six styles that were most used in early garage construction were Romanesque Revival, Beaux-Arts, Modern, Arts & Crafts, Art Deco, and Eclectic. In addition to their varied exteriors, their interiors had many differences. Some garages feature an elevator system, while others have a ramp system or are set up as a single-story storage shelter. Depending on the circulation features, early garages fit into four types of floor plans – single elevator with residential, single elevator with showroom, single elevator with storage and repair, and ramp. The early garages ranged in types of ownership. The three types that drove garage construction were private enterprise, commercial, and manufacturing enterprises.

When compiled together, this wide range of garages showcases the development of early garages and as well as their diversity. Early garages are different from current garage construction, which fits into two types – underground or open deck ramp garages. An example of an open deck ramp garage is the Motorgate Roosevelt Island Garage, which was erected in 1974. [Plate 2.4] Underground garages are prevalent throughout Manhattan. Their rise caused the demise of the stand-alone garage. Many of the early garages are distinguished and landmark-worthy pieces of architecture. This can be seen in the following survey, and read about in chapter three.

---

<sup>75</sup> (Aspegren 1998)



Picture By: Hilary Grossman, 2013

**Address:** 149 East 69th Street  
**Original Date Constructed:** 1900 with alterations in 1971, 1977, 1979  
**Original Architect:** Frank W. Drischler  
**Original Owner:** Charles T. Yerkes  
**Original Description:** Carriage House  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 3 story brick and stone residential building  
**Current Use:** Conversion  
**\* Part of the Upper East Side Historic District**



Pictures By: Hilary Grossman, 2013



*The Horseless Age* 9.5, 1902

**Address:** 168 - 176 East 75th Street  
**Original Date Constructed:** 1900 - 1902 with alterations in 1902, 1908, 1925, 1979  
**Original Architect:** Hill & Stout  
**Original Owner:** Edmund C. Stout  
**Original Description:** 3 story brownstones converted to five 4-story "auto stables" in 1902  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 4 story brick residential buildings, the original balconies have been removed from the second story, doors and windows have been replaced  
**Current Use:** Residences with still functioning garages at 168 and 174 East 75th Street  
**\* Part of the Upper East Side Historic District Extension**



Picture By: Hilary Grossman, 2013



*Garages and Motor Boat Houses, 1911*

**Address:** 168 East 70th Street, New York  
**Original Date Constructed :** 1901 with alterations in 1913, 1925, 1929, 1939, 1963, 1967, 1987  
**Original Architect:** C.P.H. Gilbert  
**Original Owner:** D.G. Reid (New Netherland Hotel)  
**Original Description:** 3 story brick stable and dwelling  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 3 story stone school - interior converted to a school by Bradley Delehanty in 1925 leaving the exterior untouched  
**Current Use:** Conversion  
**\* Part of the Upper East Side Historic District**



Picture By: Hilary Grossman, 2013

**Address:** 424 - 434 East 92nd Street, New York  
**Original Date Constructed:** 1901 with alterations in 1925, 1935, 1970, 1978, 1989  
**Original Architect:** L.C. Maurer  
**Original Owner:** A.R. Holthusen  
**Original Description:** 2 story brick stable - (converted to a garage in 1925)  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 2 story brick garage with brick detailing and metal cornice - electric sign has been removed  
**Current Use:** Garage





Picture By: Hilary Grossman, 2013



*Garages and Motor Boat Houses, 1911*

**Address:** 163 - 165 East 70th Street, New York

**Original Date Constructed:** 1901 with alterations in 1916, 1917, 1920, 1926, 1945, 1957, 1975, 1981, 1991

**Original Architect:** C.P.H. Gilbert

**Original Owner:** H.P. Wertheim and Jules Bache

**Original Description:** 3 and 4 story brick and stone stable, 32 x 90 - (163 was converted to a private garage and chauffeur's quarters by Grosvenor Atterbury in 1945 and 165 was converted to a private dwelling and garage by Otto F. Semsch in 1920)

**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased

**Current Description:** 3 and 4 story brick and stone residences with stone detailing and metal cornice

**Current Use:** Conversion

**\* Part of the Upper East Side Historic District**



Picture By: Hilary Grossman, 2013

**Address:** 178 East 73rd Street, New York

**Original Date Constructed :** 1902 with alterations in 1905, 1921, 1967, 1970, 1972, 1982

**Original Architect:** John H. Friend

**Original Owner:** John Connors

**Original Description:** Stable - (adapted for the car in 1905, converted from a garage and residence in 1982 to full residence)

**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased

**Current Description:** 3 story brick and stone residence with a metal cornice and stone detailing

**Current Use:** Conversion

**\* Part of the Upper East Side Historic District**



Picture By: Hilary Grossman, 2013

**Address:** 234 West 108th Street, New York  
**Original Date Constructed :** 1902 with alterations in 1905, 1910, 1912, 1917, 1928, 1940  
**Elevator Alteration:** 1918, 1922, 1986  
**Original Architect:** Jas W. Cole  
**Original Owner:** Nicholas Henry  
**Original Description:** 4 story brick stable, 49.7 x 98 and 100.11  
**Original Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 4 story brick garage with stone detailing, off center shaft, metal detailing on base - alterations have been made to the cornice, the elevator shaft was extended for roof parking, electric sign removed, and base altered  
**Current Use:** Garage, 98 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 310 West 144th Street, New York  
**Original Date Constructed :** 1902 with alterations in 1918, 1948  
**Elevator Alterations:** 1918  
**Original Architect:** John A. Hamilton  
**Original Owner:** Edmund Coffin  
**Original Description:** 4 story and cellar brick and stone stable, 50 x 100  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 4 story brick garage with stone detailing and metal cornice - alterations have been made to the base and window lintels, windows have been replaced  
**Current Use:** Garage, 130 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 167 East 73rd Street, New York  
**Original Date Constructed :** 1903 with alterations in 1945, 1946, 1950, 1951, 1969, 1982  
**Original Architect:** George L. Amouroux  
**Original Owner:** H.H. Benedict  
**Original Description:** 2 story and cellar, brick and stone carriage house, 50 x 96  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 2 story brick and stone residence with a metal cornice and stone detailing  
**Current Use:** Conversion  
**\* Part of the Upper East Side Historic District**



Picture By: Hilary Grossman, 2013



*Garages and Motor Boat Houses, 1911*

See Chapter 3 for more info. ●

**Address:** 55 East 90th Street, New York  
**Original Date Constructed :** 1904 with alterations in 1908, 1914, 1921, 1955, 1964, 1979, 1985, 1989  
**Original Architect:** Whitfield & King  
**Original Owner:** Andrew Carnegie  
**Original Description:** 3 story brick, concrete, and marble automobile house, 25 x 30 - held 5 electric cars  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 6 story brick and stone residence with stone detailing - alterations have been made to the second and third stories with three stories added in 1964  
**Current Use:** Conversion (Horace Mann School)



Picture By: Hilary Grossman, 2013

**Address:** 165 East 73rd Street, New York  
**Original Date Constructed :** 1904 with alterations in 1939, 1980  
**Original Architect:** George L. Amoroux  
**Original Owner:** Henry Harper Benedict  
**Original Description:** Carriage House - Partner 167 East 73rd Street  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 2 story brick and stone residence with a metal cornice and stone detailing  
**Current Use:** Conversion  
**\* Part of the Upper East Side Historic District**



Picture By: Hilary Grossman, 2013



*Garages and Motor Boat Houses, 1911*

**Address:** 146 East 56th Street, New York  
**Original Date Constructed :** 1905 with alterations in 1921, 1933, 1937, 1938, 1940, 1953, 1962, 1980, 1985  
**Original Architect:** Charles A. Gifford  
**Original Owner:** David H. Taylor  
**Original Description:** 3 story brick and stone carriage house, 40 X 29 (Functioned as a private garage that held 6 cars with chauffeur quarters until 1938 when it was converted to an auto sales room and studio, 1940 converted to a restaurant, 1962 converted to a store and offices)  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 3 story brick building with a metal storefront and cornice, stone detailing - altered base  
**Current Use:** Conversion





Picture By: Hilary Grossman, 2013

**Address:** 435 East 83rd Street, New York  
**Original Date Constructed :** 1905 with alterations in 1930, 1985  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** 5 story stable (1919 converted the ground floor for storage for cars, 1930 converted to a garage, 1985 converted to offices)  
**Garage Formal Scheme:** Medium to High-Rise w/ Elevator  
**Current Description:** 5 story brick building with stone and brick detailing, metal entrance, side shaft - 1930 electric sign has been removed  
**Current Use:** Conversion



**Address:** 113-115 East 84th Street, New York  
**Original Date Constructed :** 1905 with alterations in 1908, 1921, 1927, 1930, 1934, 1955, 1962, 1967  
**Elevator Alterations:** 1926, 1931  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Unknown  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 3 story brick garage with a central pediment roof line, brick and stone detailing  
**Current Use:** Belmont Garage, 125 parking spots

Pictures By: Hilary Grossman, 2013





Picture By: Hilary Grossman, 2013

**Address:** 207 West 75th Street, New York  
**Original Date Constructed:** Unknown with alterations in 1905, 1910, 1916, 1917, 1940, 1944, 1954, 1988  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Unknown (1947 garage for four cars and contractors office and shop, 1955 office and storage, 1998 animal hospital and office)  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 2 story brick store and office with metal cornice  
**Current Use:** Conversion  
\*Neighbor to 201-205 West 75th Street the New York Cab Company Stable a New York City Landmark designated in 2006



Picture By: Hilary Grossman, 2013



Museum of the City of New York, Wurts Bros, 1905

See Chapter 3 for more info. ●

**Address:** 177 East 73rd Street, New York  
**Original Date Constructed :** 1906 with alterations in 1915, 1921, 1930, 1955, 1999  
**Elevator Alterations:** 1930  
**Original Architect:** Charles F. Hoppe  
**Original Owner:** Automobile Realty Co.  
**Original Description:** 5 story and basement, brick and stone garage with repair shop on the 5th floor, 40 x 80  
**Garage Formal Scheme:** Medium Rise Tripartite w/o Elevator Showcased  
**Current Description:** 5 story brick, stone, metal garage with stone detailing, slate roof, dormers  
**Current Use:** Garage, 115 parking spots  
\* **New York City Landmark designated in 1980**

See Chapter 3 for more info. ●



Picture By: Hilary Grossman, 2013



*The Horseless Age*, 1913

**Address:** 214 West 80th Street, New York  
**Original Date Constructed:** 1906 with alterations in 1912  
**Elevator Alterations:** 1933, 1985  
**Original Architect:** C.B. Brun  
**Original Owner:** Palace Garage Co.  
**Original Description:** 6 story brick and stone garage, 48 x 95 - held 115 cars  
**Garage Formal Scheme:** Medium Rise Tripartite w/o Elevator Showcased  
**Current Description:** 6 story brick and stone garage with brick and stone detailing - cornice and electric sign removed, windows replaced  
**Current Use:** Garage, 195 parking spots

See Chapter 3 for more info. ●



Picture By: Hilary Grossman, 2013



*Garages and Motor Boat Houses*, 1911

**Address:** 137 West 89th Street, New York  
**Original Date Constructed:** 1906 with alterations in 1924  
**Elevator Alterations:** 1918, 1962  
**Original Architect:** L.A. Goldstone  
**Original Owner:** William C. Strange, Jr.  
**Original Description:** 5 story brick and stone garage, 50 x 95  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 5 story brick and stone garage with brick detailing, rusticated base - cornice and electrical sign removed, windows replaced, added interior office on the ground floor  
**Current Use:** Garage, 100 parking spots





Pictures By: Hilary Grossman, 2013

**Address:** 102 W. 107th Street, New York  
**Original Date Constructed:** 1906 with alterations in 1914, 1987  
**Elevator Alteration:** 1987  
**Original Architect:** Fredrick C. Browne  
**Original Owner:** Atlas Motor Co.  
**Original Description:** 4 story brick and stone garage, 75 x 96  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 4 story brick garage with brick detailing, 2 side towers and articulated roof line - alterations to the base, cornice and electric sign removed  
**Current Use:** Garage, 188 parking spots



Picture By: Hilary Grossman, 2013



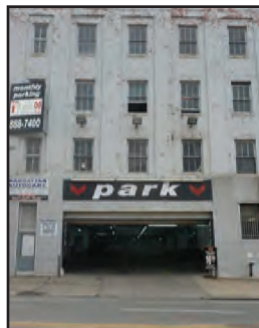
*Garages and Motor Boat Houses, 1911*

**Address:** 118 East 83rd Street, New York  
**Original Date Constructed:** 1907  
**Original Architect:** C.L. Sefert  
**Original Owner:** Stuart Duncan  
**Original Description:** 3 story brick and stone garage, 25 x 102  
**Alterations:** Unknown  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 3 story brick building with stone detailing and cornice - garage door replaced, interior heavily altered  
**Current Use:** Conversion



Picture By: Hilary Grossman, 2013

**Address:** 411 West 55th Street, New York  
**Original Date Constructed:** 1908 with alterations in 1911, 1914, 1916, 1963  
 Elevator Alterations: 1986  
**Original Architect:** Jas W. Cole  
**Original Owner:** Patrick McEntegart  
**Original Description:** 6 story brick garage, 50 x 100  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 6 story brick garage with limestone details - alterations to the cornice and base, removal of electric sign  
**Current Use:** Garage, 175 parking spots



Picture By: Hilary Grossman, 2013



See Chapter 3 for more info. ●

*Garages and Motor Boat Houses, 1911*

**Address:** 622 West 57th Street, New York  
**Original Date Constructed:** 1908 with alterations in 1910, 1912, 1914, 1917, 1924, 1926, 1927, 1934, 1937, 1948, 1951, 1953, 1968, 1974, 1982  
**Original Architect:** F.M. Andrews & Co.  
**Original Owner:** New York Taxicab Co.  
**Original Description:** 4 story red brick garage, 225 x 145 - held 175 cars on the first floor  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 4 story painted brick garage with a stuccoed base, neon sign, ramp garage  
**Current Use:** Garage, 1000 parking spots





Pictures By: Hilary Grossman, 2013

**Address:** 127 East 83rd Street, New York  
**Original Date Constructed:** 1908 with alterations in 1911, 1912, 1935, 1969, 1971, 1972, 1974  
**Elevator Alterations:** 1928, 1935, 1979  
**Original Architect:** John Hauser  
**Original Owner:** J. Henry Yockel  
**Original Description:** 4 story brick and stone garage, 51.1 x 97.2  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 4 story brick and stone garage with stone detailing and off-center shaft - alterations to the base and windows replaced, electric sign removed, 1972 added car rental service  
**Current Use:** Garage, 200 parking spots

See Chapter 3 for more info. ●

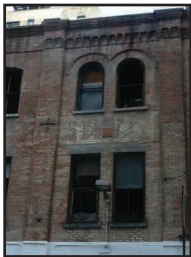


Picture By: Hilary Grossman, 2013

**Address:** 147 West 83rd Street, New York  
**Original Date Constructed:** 1908  
**Original Architect:** Unknown  
**Original Owner:** Cedarhurst Motor Livery Company  
**Original Description:** Unknown (operated as a garage and taxi service)  
**Alterations:** Unknown  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 4 story brick garage with terracotta, stone, and brick detailing - alterations to the base and cornice (now operates as a garage and rental service)  
**Current Use:** Garage, 182 parking spots



**Address:** 273 West 87th Street, New York  
**Original Date Constructed:** 1909 with alterations in 1963  
**Elevator Alteration:** 1946  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Unknown  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 3 story brick garage with brick and metal detailing - alterations to the base extending the entrance, removal of electric sign  
**Current Use:** Garage, 201 parking spots



Picture By: Hilary Grossman, 2013



**Address:** 433 East 76th Street, New York  
**Original Date Constructed:** 1910 with alterations in 1921, 1922, 1969, 1987, 1991  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Unknown  
**Garage Formal Scheme:** Unknown  
**Current Description:** 3 story concrete stuccoed garage with side shaft  
**Current Use:** Garage, 131 spaces

Picture By: Hilary Grossman, 2013





Picture By: Hilary Grossman, 2013

**Address:** 327 East 84th Street, New York  
**Original Date Constructed:** 1910 with alterations in 1952  
**Original Architect:** Gross & Keinberger  
**Original Owner:** Adolph Miller  
**Original Description:** 3 story brick and stone storage, tar and gravel roof, galvanized iron skylights and cornice, terra cotta coping, steam heat, 40 x 98.2  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 3-story brick auto shop with metal window casing and extended brick fascia board - altered base  
**Current Use:** Auto Repair Shop



Picture By: Hilary Grossman, 2013

**Address:** 532 West 122nd Street, New York  
**Original Date Constructed:** 1910  
**Elevator Alterations:** 1917, 1987  
**Original Architect:** L.P. Fluhrer  
**Original Owner:** R.C. Church of Corpus Christis  
**Original Description:** 4 story brick and reinforced concrete garage, 100 x 90  
**Alterations:** Unknown  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 4 story brick building with brick detailing, 2 off center towers - painted facade, windows replaced, removal of electric sign  
**Current Use:** Garage, 180 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 156 East 105th Street, New York  
**Original Date Constructed:** 1910 with alterations in 1917, 1919, 1947, 1958, 1968  
**Elevator Alteration:** 1918, 1956  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Non-fireproof, cellar & 4 story garage  
**Original Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 4 story brick garage with 5 story side shaft, brick detailing - Elevator shaft extended in 1956 changing the front facade, altered base, windows replaced  
**Current Use:** Garage, 89 parking spots



Pictures By: Hilary Grossman, 2013

**Address:** 457 West 150th Street, New York  
**Original Date Constructed:** 1910 with alterations in 1912, 1913  
**Elevator Alteration:** 1986  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Unknown  
**Garage Formal Scheme:** Medium Rise Tripartite w/o Elevator Showcased  
**Current Description:** 4 story brick garage with metal cornice, brick detailing, and terracotta horse head plaques - base altered  
**Current Use:** Garage, 126 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 161 West 132nd Street, New York  
**Original Date Constructed:** 1910 with alterations in 1911, 1914, 1931, 1965  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Unknown  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 4 story brick garage with brick detailing and metal cornice, off center shaft - alterations to the base, windows replaced, electric sign removed  
**Current Use:** Garage, 135 parking spots



Picture By: Barry Kimchy of Marcus & Millichap, 2011



Image: New York Times, Courtesy of Office for Metropolitan History, 1953



Rendering: Courtesy of Redeemer Presbyterian ,150w83

**Address:** 150 West 83rd Street, New York  
**Original Date Constructed:** 1910 with alterations in 1915, 1955, 1970, 1999  
**Elevator Application:** 1910  
**Original Architect:** George F. Pelham  
**Original Owner:** Max A. Cramer, Bretton Hall Garage  
**Original Description:** 4 story brick and stone garage, 67 x 115.6  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** Under Construction as of 2013- converting the structure into a church (Prior to construction the cornice was removed, electric sign replaced, and base altered)  
**Current Use:** Conversion to Church Underway



Picture By: Hilary Grossman, 2013

**Address:** 440 East 91st Street, New York  
**Original Date Constructed:** 1911 with alterations in 1923, 1927, 1958  
**Elevator Alterations:** 1915, 1933  
**Original Architect:** John P. Boyland  
**Original Owner:** Cunningham & Kearns  
**Original Description:** 6 story brick manufacturing building, 50 x 90  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 5 story brick garage and office with brick detailing  
**Current Use:** Mixed Use  
\* Altered for automobile storage in 1927



Picture By: Hilary Grossman, 2013

**Address:** 9 -11 West 100th Street  
**Original Date Constructed:** 1912 with alterations in 1926  
**Elevator Alteration:** 1913, 1982  
**Original Architect:** Henry J. Howitz  
**Original Owner:** Abe Bruder  
**Original Description:** 3 story brick garage, 50 x 100.11  
**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased  
**Current Description:** 3 story brick garage with brick detailing - alterations to the base and cornice  
**Current Use:** Garage, 75 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 159 East 77th Street, New York  
**Original Date Constructed:** 1913 with alterations in 1916, 1922, 1937, 1963  
**Elevator Alterations:** 1914, 1939, 1984  
**Original Architect:** George F. Pelham  
**Original Owner:** The Ardsley Garage Co., Max A. Kramer (Pres.)  
**Original Description:** 5 story brick garage, 75 x 101  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 5 story brick garage with terracotta facade and detailing - altered base  
**Current Use:** Garage, 200 parking spots



Pictures By: Hilary Grossman, 2013

**Address:** 236 East 117th Street, New York  
**Original Date Constructed:** 1913 with alterations in 1946, 1981  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Non-fireproof, cellar & 1 story garage (1917 plans for 4 story fireproof garage by DeRose & Cavalieri for Jno. Ginnattasio - speculated that it was never built)  
**Garage Formal Scheme:** Unknown  
**Current Description:** 1 story concrete garage - electric sign removed  
**Current Use:** Garage



Pictures By: Hilary Grossman, 2013

**Address:** 305 East 80th Street, New York  
**Original Date Constructed:** 1913 with alterations in 1927, 1929, 1970, 1973  
**Elevator Alterations:** 1914, 1915, 1985  
**Original Architect:** John C. Kirby  
**Original Owner:** Sterling Stable, Charles P. Kimmey (Pres.)  
**Original Description:** 5 story brick stable and garage, 75 x 102 (office and garage on first floor, second floor stable and garage, third and fifth floor garage, fourth floor repair shop and garage, dead storage on the roof)  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 5 story stuccoed garage with 6 story central shaft, repair shop and office - stuccoed facade and altered base, electric sign replaced  
**Current Use:** Sterling Garage, 233 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 528 West 162nd Street, New York  
**Original Date Constructed:** 1914  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Unknown  
**Alterations:** Unknown  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 3 story brick garage with 2 off center towers, stucco base - altered base  
**Current Use:** Garage, 158 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 422 East 91st Street, New York

**Original Date Constructed:** 1915

**Original Architect:** Unknown

**Original Owner:** Unknown

**Original Description:** Unknown

**Alterations:** Unknown

**Garage Formal Scheme:** Low Rise Multi-Bay w/o Elevator Showcased

**Current Description:** 3 story brick garage with side tower, brick detailing - elevator shaft extended to allow for rooftop parking

**Current Use:** Garage, 136 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 4162 Broadway, New York

**Original Date Constructed:** 1915 with alterations in 1916, 1958

**Elevator Alterations:** 1915, 1971

**Original Architect:** Jas. P. Whiskeman

**Original Owner:** Thomas Smith

**Original Description:** 4 story brick, fireproof garage, 78 x 101

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 4 story brick garage with brick detailing and 5 story central shaft with pediment top - base altered, electric sign removed

**Current Use:** Garage, 398 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 519 West 161st Street, New York  
**Original Date Constructed:** 1916 with alterations in 1938, 1943, 1950, 1951, 1960, 1965, 1970  
**Original Architect:** Janes & Cordes  
**Original Owner:** James Bradley  
**Original Description:** 4 story fireproof garage, 50 x 99 (In 1943 converted to a warehouse with parking on the ground floor, 1951 converted to a full warehouse, 2000 converted back to a garage)  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 4 story brick garage with brick detailing, off center shaft, tile ornament - altered base, replacement of electric sign  
**Current Use:** Garage, less than 150 parking spots



Pictures By: Hilary Grossman, 2013

**Address:** 203 West 77th Street, New York  
**Original Date Constructed:** 1916 with alterations in 1921, 1922, 1949  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Unknown (1923 Certificate of Occupancy lists it as storage for automobiles on all six floor plus a cellar)  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 6 story brick garage with metal cornice and window casements, brick detailing - base altered, electric sign replaced  
**Current Use:** Garage, 75 parking spots



Pictures By: Hilary Grossman, 2013

**Address:** 267 West 87th Street, New York

**Original Date Constructed:** 1916

**Original Architect:** Unknown

**Original Owner:** Unknown

**Original Description:** Fireproof, cellar and 7 story garage (offices on the mezzanine)

**Alterations:** Unknown

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 7 story brick garage with brick detailing and central shaft - altered base, electric sign removed

**Current Use:** Garage



Picture By: Hilary Grossman, 2013

**Address:** 554 West 174th Street, New York

**Original Date Constructed:** 1916 with alterations in 1919, 1922

**Original Architect:** Glasser & Co.

**Original Owner:** Thomas F. McAvoy

**Original Description:** 2 story fireproof garage, 75 x 100

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick garage with brick detailing and an elaborate articulated roof line - altered base, electric sign removed

**Current Use:** Garage





Picture By: Hilary Grossman, 2013



Courtesy of Municipal Archives, 1930

**Address:** 162 East 92nd Street, New York

**Original Date Constructed:** 1916 with alterations in 1940, 1941, 1953, 1956, 1969, 1983

**Original Architect:** Delano & Aldrich

**Original Owner:** Willard D. Straight

**Original Description:** 3 story fireproof garage and dwelling, held a 255-gallon gas tank in the basement, first floor had enameled brick walls, turntable, and tire closet in the back, 25 x 100

**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased

**Current Description:** 4-story building with brick detailing, stone cornice, double height second floor - 2010 alteration to second and third floors, addition of two floors (Functioned as a garage and residence up until 2010 renovation - during the renovation they found the original turntable and gas tank)

**Current Use:** Conversion



Picture By: Hilary Grossman, 2013



The American Architect, 1916

**Address:** 407 Park Avenue

**Original Date Constructed:** 1916 (?) with alterations in 1921, 1934, 1937, 1971, 1980

**Original Architect:** Cross and Cross

**Original Owner:** Unknown (Private)

**Original Description:** 2 story stone garage and residence with garland ornamentation (1921 converted to store and residence, 1937 converted to store)

**Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased

**Current Description:** 2 story commercial boutique - stuccoed facade, cast-stone ornamentation - balcony addition to the facade, base altered (central doorway shrunk and two large windows replaced side doorways)

**Current Use:** Conversion





Picture By: Hilary Grossman, 2013

**Address:** 219 West 77th Street, New York

**Original Date Constructed:** 1917 with alterations in 1917, 1926, 1972

**Elevator Alterations:** 1917, 1926, 1984

**Original Architect:** Unknown

**Original Owner:** Unknown

**Original Description:** Fireproof, cellar and 5 story garage (1926 converted to garage and repair shop)

**Garage Formal Scheme:** Medium Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 5 story brick garage with central roof addition, brick detailing, garage and repair shop - base altered, electric sign replaced

**Current Use:** Garage, 100 parking spots

See Chapter 3 for more info. ●



Picture By: Hilary Grossman, 2013

**Address:** 337 East 64th Street, New York

**Original Date Constructed:** 1917 with alterations in 1919, 1948, 1965, 1968, 1978, 1984, 1987

**Elevator Alterations:** 1917, 1986

**Original Architect:** Hunt & Hunt

**Original Owner:** Co-operative Bldg. Construction Co.

**Original Description:** 5 story fireproof garage, 100 x 90 w/ offices on the first floor

**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased

**Current Description:** 5 story brick garage and repair shop with brick detailing and cast iron window casing - altered base, electric sign removed

**Current Use:** Garage, 300 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 111 East 82nd Street, New York

**Original Date Constructed:** 1918 with alterations in 1920, 1969

**Original Architect:** Unknown

**Original Owner:** Unknown

**Original Description:** Non-fireproof, basement and 4 story garage

**Garage Formal Scheme:** Medium Rise Tripartite w/o Elevator Showcased

**Current Description:** 4 story brick and stone garage with brick and stone detailing, metal cornice above the ground floor - altered base and cornice, elevator altered in 1920, electric sign replaced

**Current Use:** Garage, 143 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 343 East 99th Street, New York

**Original Date Constructed:** 1919 with alterations in 1966, 1959, 1923, 1924, 1929, 1931, 1932, 1933, 1938, 1947, 1949, 1959, 1966, 1981, 1985

**Original Architect:** Philip Goldrich

**Original Owner:** Meyer A. Schuman

**Original Description:** 2 story brick garage, 185 x 100.11 - (1933 conversion to a factory, balcony added in the interior)

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick garage with brick detailing, articulated roof line

**Current Use:** Conversion (warehouse)





Picture By: Hilary Grossman, 2013

**Address:** 2479 Amsterdam Avenue, New York

**Original Date Constructed:** 1919 with alterations in 1933, 1935, 1969, 1972

**Original Architect:** Louis A. Sheinart

**Original Owner:** Abraham B. Meyer

**Original Description:** 2 story brick garage, 129 x 100

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick garage - electric sign removed

**Current Use:** Yeshiva University Garage, 140 parking spots



Pictures By: Hilary Grossman, 2013

**Address:** 154 East 53rd Street, New York

**Original Date Constructed:** 1920 with alterations in 1926, 1929, 1960, 1965

**Original Architect:** Unknown

**Original Owner:** Unknown

**Original Description:** Non-fireproof, basement and 5 story dwelling

**Garage Formal Scheme:** High Rise Multi-Bay w/o Elevator Showcased

**Current Description:** 8 story brick building with brick detailing - altered facade in 1960, elevator changed in 1962, electric sign replaced

**Current Use:** Garage, 149 parking spots

\* Altered to a garage post construction in 1960



Picture By: Hilary Grossman, 2013

**Address:** 55 East 125th Street, New York

**Original Date Constructed:** 1920

**Original Architect:** Unknown

**Original Owner:** Unknown

**Original Description:** Unknown

**Alterations:** Unknown

**Garage Formal Scheme:** Unknown

**Current Description:** Conversion Under Way

**Current Use:** Vacant

\* Marked as a garage on Sanborn map, 1920



Pictures By: Hilary Grossman, 2013

**Address:** 403 East 65th Street, New York

**Original Date Constructed:** 1921 with alterations in 1933, 1964

**Original Architect:** Samuel A. Hert

**Original Owner:** 403 - 411 East 65th St. Corp.

**Original Description:** 2 story brick fireproof garage, 100 x 100 (1925 already noted as having a third story)

**Garage Formal Scheme:** Two-Story

**Current Description:** 3 story brick garage with stone detailing - electric sign removed

**Current Use:** Garage, 180 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 526 West 134th Street, New York

**Original Date Constructed:** 1921 with alterations in 1945, 1948, 1956, 1967, 1968

**Original Architect:** Charles B. Meyers

**Original Owner:** Chelsea Realty Co.

**Original Description:** 2 story brick garage, 85 x 199 (1958 - 1968 held a gas station, sales department, repair shop, auto laundry, and storage)

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick garage, neon sign - altered facade signs and canopy

**Current Use:** Garage, 175 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 327 East 64th Street, New York

**Original Date Constructed:** 1921 with alterations in 1925, 1948, 1960, 1963, 1966, 1970

**Original Architect:** Magnuson & Kleinart

**Original Owner:** Sloane & Moeller

**Original Description:** 2 story brick garage, 125 x 100 (1950 garage and repair shop, 1970 garage used for auto rental, repair, and storage - held a welding and spraying room)

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick garage with brick and stone detailing, used for car rental - electric sign removed

**Current Use:** Garage, 120 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 506 West 181st Street, New York  
**Original Date Constructed:** 1921 with alterations in 1968, 1970, 1972  
**Original Architect:** Jos. P. Whiskeman  
**Original Owner:** Abraham Ruth  
**Original Description:** 3 story fireproof garage w/ offices, sales room & washrooms for automobiles, 75 x 109 (1922 certificate of occupancy notes a fourth floor having an office and storage)  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 4 story brick garage/office/eating establishment with brick detailing and articulated roof line - electric sign removed and base altered  
**Current Use:** Garage, 197 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 103 West 108th Street, New York  
**Original Date Constructed:** 1922 with alterations in 1954, 1968  
**Original Architect:** Bloch & Hesse  
**Original Owner:** The 36th Street Garage  
**Original Description:** 3 story brick public garage, 75 x 100  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 3 story brick garage with central pediment, brick detailing - windows and electric sign removed, base altered  
**Current Use:** Garage, 125 parking spots





Pictures By: Hilary Grossman, 2013

**Address:** 225 St. Nicholas Avenue, New York

**Original Date Constructed:** 1922 with alterations in 1924, 1970

**Original Architect:** A.J. Simberg

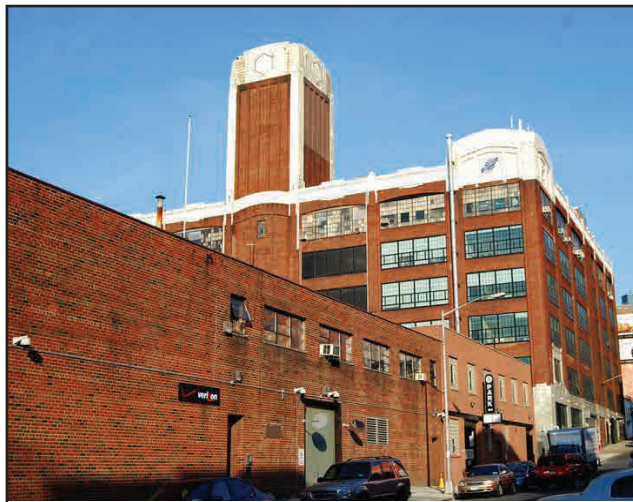
**Original Owner:** Michael Kaufman

**Original Description:** 2 story brick garage, 88 x 149

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 2 story brick building with off center 3 story shaft with pediment top - alterations to base/facade, elevator shaft extended for roof parking, electric sign removed

**Current Use:** Garage, 160 parking spots



Picture By: Hilary Grossman, 2013



Courtesy of Columbia University, 1930

**Address:** 615 West 131st Street, New York

**Original Date Constructed:** 1923 with alterations in 1924, 1931, 1937, 1940, 1943, 1953, 1956, 1961, 1963, 1967

**Original Architect:** W.S. Ferguson Co.

**Original Owner:** The Studebaker Corp. Of America

**Original Description:** 6 story fireproof office and storage, 175 x 199 - garage and storage w/ display stockroom on 2nd floor, service and repair shop on 3rd and 4th floor (1937 converted to milk processing plant w/ garage, 1953 - 1967 factory and garage)

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 6 story brick offices and stores with stone base and terracotta parapet - part of 2007 conversion

**Current Use:** Conversion



Picture By: Hilary Grossman, 2013

**Address:** 250 Bradhurst Avenue, New York  
**Original Date Constructed:** 1923 with alterations in 1936, 1965  
**Original Architect:** Meisner & Uffner  
**Original Owner:** Watson Home Co.  
**Original Description:** 2 story brick public garage, 101 x 144  
**Garage Formal Scheme:** Two-Story  
**Current Description:** 2 story brick garage and repair shop with brick detailing - altered ground floor, 1965 added a repair shop  
**Current Use:** Garage, 145 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 673 St. Nicholas Avenue, New York  
**Original Date Constructed:** 1923 with alterations in 1926, 1927, 1934, 1950  
**Original Architect:** M. Margolin  
**Original Owner:** Barney Estate Co.  
**Original Description:** 2 story brick garage, 228 x 93  
**Garage Formal Scheme:** Two-Story  
**Current Description:** 2 story brick garage with large multi-paned awning windows  
**Current Use:** Garage, 180 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 439 East 77th Street, New York

**Original Date Constructed:** 1924

**Original Architect:** Louis A. Sheinart

**Original Owner:** John Sander

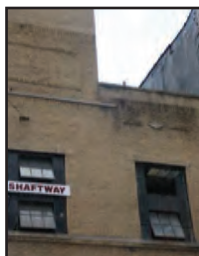
**Original Description:** 2 story brick fireproof garage, 70 x 102

**Alterations:** Unknown

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick garage with central articulated roof line - electric sign replaced

**Current Use:** Garage, 96 parking spots



Pictures By: Hilary Grossman, 2013

**Address:** 240 East 54th Street, New York

**Original Date Constructed:** 1924 with alterations in 1944, 1947, 1950, 1955, 1965, 1983

**Elevator Alteration:** 1959

**Original Architect:** Sloan Roberston

**Original Owner:** Dexter Holding Corp.

**Original Description:** 2 story brick garage, concrete roof, 100 x 100

**Garage Formal Scheme:** Two-Story

**Current Description:** 3 story brick garage with side tower, brick detailing - elevator shaft extended in 1959 for rooftop parking, base altered

**Current Use:** Garage, 188 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 434 East 90th Street, New York

**Original Date Constructed:** 1924 with alterations in 1925, 1935, 1970, 1978, 1989

**Original Architect:** Victor Mayer

**Original Owner:** Wepsin & Glass Realty Corp. (Noted owner in the Office of Metropolitan Manhattan Database - most likely a typo and the owner was Weprin)

**Original Description:** 2 story brick public garage, slag roof, 144 x 100

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick car rental garage with brick detailing and stone plaque, central articulated roof-line - altered base, electric sign removed

**Current Use:** Garage



Pictures By: Hilary Grossman, 2013

**Address:** 220 East 117th Street, New York

**Original Date Constructed:** 1924

**Elevator Alteration:** 1987

**Original Architect:** William F. Doyle

**Original Owner:** Fred Cineatti

**Original Description:** 2 story brick fireproof garage, 75 x 100

**Alterations:** Unknown

**Garage Formal Scheme;** Low Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 2 story brick garage with brick detailing, 2 side towers - electric signs and windows removed, addition of signs

**Current Use:** Garage, 100 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 316 West 118th Street, New York  
**Original Date Constructed:** 1924 with alterations in 1923, 1926, 1931, 1999  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Fireproof, cellar and 3 story garage  
**Garage Formal Scheme:** Unknown  
**Current Description:** Under Construction (Conversion Under Way)  
**Current Use:** Vacant



Picture By: Hilary Grossman, 2013



*Courtesy of Avery Drawings & Archives, Columbia University, 1924*

**Address:** 3-17 East 102nd Street, New York  
**Original Date Constructed:** 1924 with alterations in 1927, 1943, 1952, 1960, 1963, 1965, 1968, 1985, 1988  
**Original Architect:** Emery Roth  
**Original Owner:** H.A.B. Realty Corp.  
**Original Description:** 4 story brick garage, asphalt roof, 200 x 100 (ramp)  
**Garage Formal Scheme:** Medium Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 7 story brick hospital - heavily altered facade including glass inserts, addition of 3 stories, altered base  
**Current Use:** Conversion

See Chapter 3 for more info. ●



Picture By: Hilary Grossman, 2013

**Address:** 4172 Broadway, New York

**Original Date Constructed:** 1924 with alterations in 1926, 1973

**Original Architect:** Weinberger & Weishoff

**Original Owner:** David L. Philips

**Original Description:** 4 story and basement brick public fireproof garage w/ stores on ground floor, 103 x 156

**Garage Formal Scheme:** High-Rise Multi-Bay w/o Elevator

**Current Description:** 6 story brick garage - added two stories in 1926 and altered base

**Current Use:** Garage, 398 parking spots

\* Prior to 1924 there was a one store metal garage on the site



Pictures By: Hilary Grossman, 2013

**Address:** 512 East 74th Street, New York

**Original Date Constructed:** 1924 with alteration in 1957

**Original Architect:** William Shary

**Original Owner:** Berson Construction Co.

**Original Description:** 2 story brick garage, repair shop, office, gas pumps, with asphalt roof, 100 x 102

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick garage with brick and stone detail, asphalt roof - electric sign removed

**Current Use:** Garage





Pictures By: Hilary Grossman, 2013

**Address:** 332 East 76th Street, New York

**Original Date Constructed:** 1925 with alteration in 1946, 1960, 1962, 1969, 1986

**Original Architect:** Charles H. Lench, Edward L. Shire Association

**Original Owner:** 332-340 E. 76th Street Corp.

**Original Description:** 3 story brick fireproof garage, concrete roof, 125 x 102

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 3 story brick garage with central 5 story shaft, brick detailing, neon sign - extended entrance ways on base, 1960 added roof top parking

**Current Use:** Garage, 290 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 614 West 153rd Street, New York

**Original Date Constructed:** 1924 with alterations in 1946

**Original Architect:** L.B. Mapes

**Original Owner:** Dean-Murray Garage Co.

**Original Description:** 4 story brick garage, 50 x 99

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick garage with basement, brick detailing, articulated roof line - basement facade altered, electric sign replaced

**Current Use:** Garage, 135 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 412 East 90th Street, New York

**Original Date Constructed:** 1925 with alterations in 1962, 1987

**Original Architect:** H.I. Feldman

**Original Owner:** V. M. L. Holding Corp.

**Original Description:** 2 story brick garage, composition roof, 117 x 100

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick garage with articulated roof line - addition of canopy to the base, windows replaced, new entrance way (pedestrian door)

**Current Use:** Garage, 150 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 421 East 91st Street, New York

**Original Date Constructed:** 1925 with alterations in 1934, 1963

**Original Architect:** William Shary

**Original Owner:** Bernson Construction Co.

**Original Description:** 2 story brick garage, 99 x 99 (1963 used for automobile sales, repairs, and storage)

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story brick commercial property with greenhouse on roof - elevator added in 1986

**Current Use:** Conversion



Pictures By: Hilary Grossman, 2013

**Address:** 304 - 316 East 95th Street, New York

**Original Date Constructed:** 1925 with alterations in 1941, 1974, 1981

**Original Architect:** Bruno W. Berger & Son

**Original Owner:** Samuel Krasilousky

**Original Description:** 2 story brick garage, plastic slate roof, 25 x 89

**Garage Formal Scheme:** Two-Story

**Current Description:** 2-story brick garage with brick detailing, side elevator shaft - altered base, electric sign removed

**Current Use:** Garage



Picture By: Hilary Grossman, 2013



*New York Times*, Courtesy of Office for Metropolitan History, 1939

**Address:** 422 East 89th Street, New York

**Original Date Constructed:** 1925 with alterations in 1945, 1953, 1955, 1959, 1963, 1971, 1981, 1984, 1989

**Original Architect:** Charles P. H. Gilbert

**Original Owner:** Onega Corp. (Otto Kahn)

**Original Description:** Two 3-story brick dwelling and garage, tile roof, held 10 cars, 25 x 100

**Original Garage Formal Scheme:** Low Rise Tripartite w/o Elevator Showcased

**Current Description:** 7 story brick garage and residence/apartments with brick detailing - top four stories added in 1988

**Current Use:** Mixed Use





Picture By: Hilary Grossman, 2013

**Address:** 143 West 108th Street, New York

**Original Date Constructed:** 1925

**Original Architect:** Unknown

**Original Owner:** Unknown

**Original Description:** Unknown

**Alterations:** Unknown

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 5 story brick garage with central shaft and 2 side towers, brick detailing - altered base

**Current Use:** Garage, 300 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 151 West 108th Street, New York

**Original Date Constructed:** 1925

**Original Architect:** Unknown

**Original Owner:** Unknown

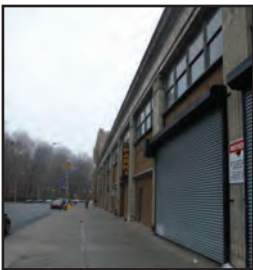
**Original Description:** Unknown

**Alterations:** Unknown

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 4 story brick garage with central shaft and articulated top, brick detailing - altered base, elevator altered in 1987

**Current Use:** Garage, 250 parking spots



Pictures By: Hilary Grossman, 2013



See Chapter 3 for more info. ●

Rendering: Courtesy of Acadia Realty Trust, Sherman Plaza

**Address:** 4650 Broadway / 2 Sherman Avenue, New York

**Original Date Constructed:** 1926 with alterations in 1954, 1963, 1968

**Original Architect:** Albert Kahn

**Original Owner:** Packard Motor Car Co.

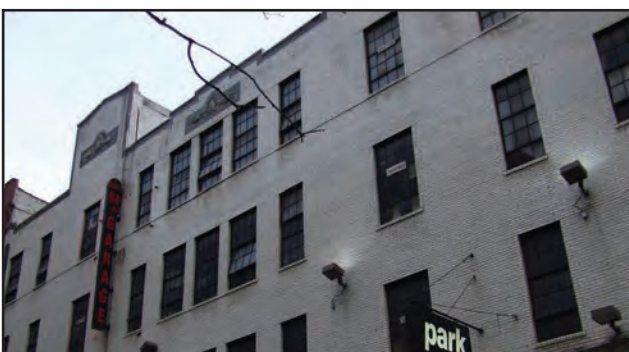
**Original Description:** 2 story brick salesroom & service station, 204 x 80 (1954 converted to public garage, 1963 converted to garage/restaurant/bowling alley with office, 1968 converted to garage & welfare center)

**Garage Formal Scheme:** Two-Story

**Current Description:** 2 story public garage - electric sign removed

**Current Use:** Garage, 150 parking spots

\*Top Right: Rendering of future development for the site



Picture By: Hilary Grossman, 2013

See Chapter 3 for more info. ●

**Address:** 231 East 94th Street, New York

**Original Date Constructed:** 1926 with alterations in 1937

**Original Architect:** John DeHart

**Original Owner:** Binshore Garage Co.

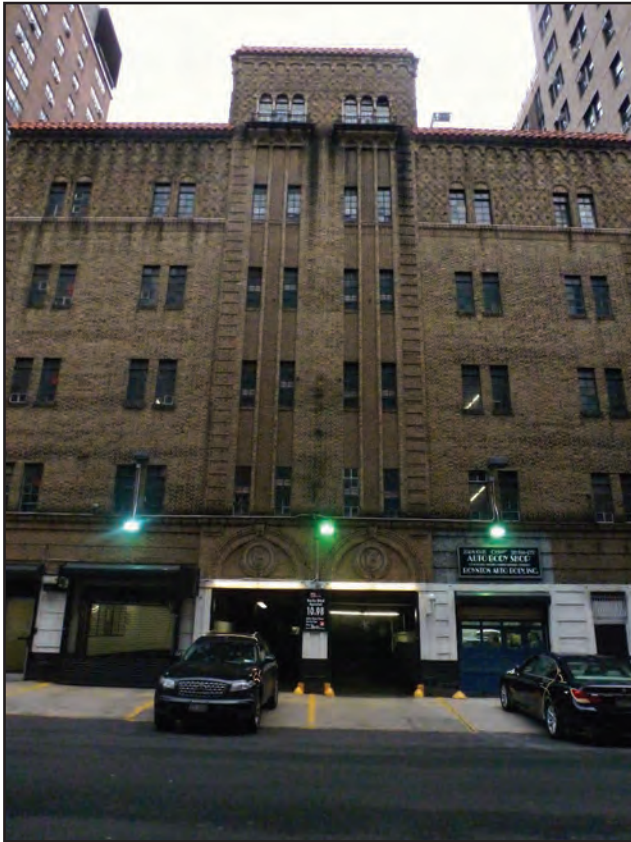
**Original Description:** 3 story brick public garage, 102 x 100

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 4 story brick garage with 2 towers, central articulated roof line, terracotta detail - minimal alteration to the base

**Current Use:** Garage, 390 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 204 West 101st Street, New York  
**Original Date Constructed:** 1926 with alterations in 1955, 1964  
**Original Architect:** Emery Roth  
**Original Owner:** S. & L. Building Corp.  
**Original Description:** 3 story brick garage & storage, asphalt roof, 78 x 150  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 5 story brick garage with brick detailing, terracotta roof line, 6 story central tower - minimal intervention on the base and electric sign removed  
**Current Use:** Garage, 300 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 3795 10th Avenue, New York  
**Original Date Constructed:** 1926 with alterations in 1984  
**Original Architect:** Springsteen & Goldhammer  
**Original Owner:** Bestway Realty Co.  
**Original Description:** 2 story brick garage, 99 x 100 - (added an auto repair shop, welding, and paint spraying service in 1984, 2005 altered to include a restaurant)  
**Garage Formal Scheme:** Two-Story  
**Current Description:** 2 story brick garage with central tower - painted  
**Current Use:** Garage, 100 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 3896 10th Avenue, New York  
**Original Date Constructed:** 1927 with alterations in 1953, 1960, 1962, 1979  
**Original Architect:** S. J. Kessler Inc.  
**Original Owner:** Lea Construction Corporation  
**Original Description:** 2 story brick garage, 68 x 150  
**Garage Formal Scheme:** Two-Story  
**Current Description:** 2 story garage, auto repair, and body shop with stone detailing - electric sign replaced  
**Current Use:** Garage, 195 parking spots



Pictures By: Hilary Grossman, 2013

**Address:** 641 West 59th Street, New York  
**Original Date Constructed:** 1927 with alterations in 1937, 1943, 1944  
**Original Architect:** Oscar H. Merritt  
**Original Owner:** N.Y. Cent. R. R. Co.  
**Original Description:** 1 story brick storage, 100 x 200  
**Garage Formal Scheme:** Two-Story  
**Current Description:** Under Construction  
**Current Use:** Vacant





Picture By: Hilary Grossman, 2013

**Address:** 270 Dyckman Street, New York

**Original Date Constructed:** 1927 with alterations in 1980

**Original Architect:** Otto J. Gette

**Original Owner:** Evelina B. Peckins

**Original Description:** 3 story brick fireproof garage, 100 x 149 (1980 added a auto body and repair shop)

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 3 story brick and stone garage with stone detailing, metal roof, off center tower - removed electric sign

**Current Use:** Garage, 250 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 206 West 77th Street, New York

**Original Date Constructed:** 1928 with alterations in 1933, 1977, 1979, 1984

**Original Architect:** Jos. L. Steinam

**Original Owner:** Stephen - Thouret Holding Co.

**Original Description:** 6 story brick garage, 75 x 75

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 6 story brick garage and car rental with 7 story central shaft, brick detailing - altered base, replaced electric sign

**Current Use:** Garage, 250 parking spots





Picture By: Hilary Grossman, 2013

**Address:** 234 East 85th Street, New York

**Original Date Constructed:** 1928 with alterations in 1962, 1981

**Original Architect:** P.P.

**Original Owner:** Tadpole Building Corp.

**Original Description:** 6 story brick garage, 80 x 102 w/ storage, auto repair shop, chauffeur's room and offices on the second floor

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 6 story brick garage with 7 story central shaft and brick detailing - altered base, electric sign replaced

**Current Use:** Garage, 280 parking spots



Pictures By: Hilary Grossman, 2013

**Address:** 157 West 83rd Street, New York

**Original Date Constructed:** 1928 with alterations in 1932

**Elevator Alterations:** 1931, 1945, 1987

**Original Architect:** DeYoung & Moscowitz

**Original Owner:** Goyal Holding Corp.

**Original Description:** 5 story fireproof storage building, 59 x 102 w/ commercial vehicles store on ground floor with privately owned cars on the upper floors

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 5 story brick garage with 6 story central shaft and brick detailing - electric sign removed, base altered

**Current Use:** Garage, 182 parking spots

See Chapter 3 for more info. ●



Picture By: Hilary Grossman, 2013



*New York Times*, Courtesy of Office for Metropolitan History, 1936

**Address:** 34 - 43 West 61st Street, New York

**Original Date Constructed:** 1929

**Original Architect:** Hill & Murdock

**Original Owner:** Kent Automatic Parking

**Original Description:** 24 story brick and terracotta mechanical parking garage

**Garage Formal Scheme:** High-Rise Multi-Bay w/o Elevator

**Current Description:** 24 story brick and terracotta condos - interior heavily altered in 2008 for conversion to condos

**Current Use:** Conversion

**\* New York City Landmark designated in 1983**



Pictures By: Hilary Grossman, 2013

**Address:** 355 East 76th Street, New York

**Original Date Constructed:** 1929 with alterations in 1944, 1962, 1968, 1970, 1979, 1982, 1986, 1987

**Original Architect:** George G. Miller

**Original Owner:** 357 E. 76th Street Corp.

**Original Description:** 6 story brick garage, 75 x 102 - (1971 added car rental services)

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 6 story brick garage with 7 story central tower, brick detailing - base altered and electric sign replaced

**Current Use:** Garage, 260 parking spots



See Chapter 3 for more info. ●



*New York Times*, Courtesy of Jerome Weinstein, 1930

**Address:** 152 East 87th Street, New York

**Original Date Constructed:** 1929 with alterations in 1931, 1934, 1947, 1950, 1954, 1958

**Original Architect:** J.H. Galloway

**Original Owner:** Maudon Realty Co.

**Original Description:** 6 story garage and storage, 104 x 100

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 6 story brick garage with 7 story central tower, brick detailing, multicolor brick - facade has been replaced, electric sign replaced

**Current Use:** Garage, 515 parking spots



Picture By: Hilary Grossman, 2013



**Address:** 409 East 60th Street, New York

**Original Date Constructed:** 1929 with alteration in 1932, 1938, 1959, 1960, 1968, 1973, 1989

**Original Architect:** C. Leslie Weir

**Original Owner:** Knickerbocker Ice Co., Charles C. Small (Pres.)

**Original Description:** 4 story brick plant, 100 x 100

**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased

**Current Description:** 6 story brick garage with 7 story central tower and brick detailing (1960 - roof access granted by extending the elevator shaft)

**Current Use:** Garage, 168 parking spots

Picture By: Hilary Grossman, 2013





Picture By: Hilary Grossman, 2013

**Address:** 169 East 87th Street, New York  
**Original Date Constructed:** 1930 with alterations in 1931, 1966, 1980  
**Original Architect:** Unknown  
**Original Owner:** Unknown  
**Original Description:** Fireproof, cellar and 6 story garage, 45' front, chauffeur's locker room and offices on mezzanine above ground floor  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/o Elevator Showcased  
**Current Description:** 6 story brick garage with brick detailing, off center shaft - elevator altered in 1931 (xtruded for roof access)  
**Current Use:** Garage, 175 parking spots



Picture By: Hilary Grossman, 2013



Rendering: Courtesy of BSKS Architects, LLP

See Chapter 3 for more info. ●

**Address:** 406 - 416 East 91st Street, New York  
**Original Date Constructed:** 1930 with alterations in 1933, 1966, 1972, 1984  
**Original Architect:** Horace Ginsberg  
**Original Owner:** Reidback Realty Corp.  
**Original Description:** 3 story brick garage, 125 x 100  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 3 story building, zigzag decoration in multi-color brick  
**Current Use:** Demolished, Conversion to a Recreational Center (Under Construction)  
 \* Top Left picture of Current Condition, Top Right picture of Future Condition, Bottom Left Historic Image



New York Times, Courtesy of Office for Metropolitan History, 1955



Picture By: Hilary Grossman, 2013

**Address:** 205 West 101st Street, New York  
**Original Date Constructed:** 1930 with alterations in 1924, 1929, 1933, 1967  
**Original Architect:** William Shary  
**Original Owner:** 205 W. 101st S. Realty Corp.  
**Original Description:** 7 story brick garage, 75 x 100 - had auto repair facilities on each floor  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 7 story brick garage with 8 story central tower, brick detailing - base altered, electric sign replaced  
**Current Use:** Garage, 300 parking spots



Picture By: Hilary Grossman, 2013

**Address:** 310 East 64th Street, New York  
**Original Date Constructed:** 1930 with alterations in 1948, 1950, 1952, 1968  
**Original Architect:** Max Siegel & George H. Levy  
**Original Owner:** Corcoran, Fitzgerald & Co.  
**Original Description:** 4 story brick garage, 100 x 90 - (1948 added repair shop to 4th floor, 1968 added roof top parking)  
**Garage Formal Scheme:** Medium to High-Rise Multi-Bay w/ Elevator Showcased  
**Current Description:** 4 story brick garage and car rental service with 2 towers, brick detailing - altered facade  
**Current Use:** Garage

## Analysis of Survey:

In the survey, I identified twenty-seven garages erected between 1897 and 1906, thirteen garages built between 1907 and 1910, twelve garages between 1911 and 1916, and fifty-two garages between 1917 and 1930. Of those garages, twenty-one were built for private storage, sixty-nine were built for commercial enterprise, two for taxi services, one for joint commercial and taxi services, one for a manufacturer, one for joint commercial and manufacturing purposes, three for joint commercial and automobile sales, and six are unknown. In addition, sixty-seven have remained garages, seven have added office space which produced a mixed use building, two have added residential space to create a mixed use building, twenty-four have been converted for commercial purposes, and four are vacant.

In addition, I identified four garage formal schemes. They are low to medium-rise tripartite without the elevator expressed, medium to high-rise multi-bay without the elevator expressed, medium to high-rise multi-bay with elevator expressed and one to two-story. When arranged chronologically, the garages showcase the typological evolution of the early urban garage. [Plate 2.1 – 2.3] From 1900 to 1905, the design of garages was similar to that of stables. An example in the survey is 168 – 176 East 75<sup>th</sup> Street, [Survey Page 28] which is a garage built from in 1902. This garage was designed by Hill & Stout. It displays a similar formal scheme on the façade to that of the 167, 169, 171 West 89<sup>th</sup> Street Stables, which was built in 1892. [Plate 2.5] 167 – 171 West 89<sup>th</sup> Street Stables, designed by Frank A. Rooke, are a Romanesque Revival four-story high, three bay wide, brick structure with arched openings and an alternating gable and flat roofline.<sup>76</sup> 168-176 East 75<sup>th</sup> Street is an Arts and Crafts four-story high, five bay wide, brick structure with arched windows openings on the second floor. It has an alternating gable and flat roofline. The detailing and ornamentation on these two structures are different. This separates them stylistically, but formally these two structures use the same formal design scheme.

Other early garages, such as the row on East 73<sup>rd</sup> Street, [Plate 2.6] were designed using the influence of other stable type precedents. This includes 213 West 58<sup>th</sup> Street, which is still called the Helen Miller Gould Stable. [Plate 2.7] It was designed by York and Sawyer in 1902. The Gould Stable has a rusticated stone base clearly delineated from the upper stories. It features

---

<sup>76</sup> (Claremont Stables 1900)



brick with stone detailing, as well as a central set of windows. The building is topped by an ornate roof.<sup>77</sup>

The row of garages on East 73<sup>rd</sup> Street used the same tripartite design scheme. They still all have a stone base, brick upper façade with stone detailing, and an ornate cornice. When first built, the garages employed storage on lower levels with residential accommodations on the upper floors. This was similar to that of the stable, which had storage for the horses and carriages on the lower level, with residential accommodations on the upper levels for the caretakers.

The larger garages built from 1900 to 1905 were simple in design. Like the smaller garages, the larger multi-bay garages were adaptations of the stable type. The larger garages also had bases clearly separated from the upper levels, and they were topped by a cornice. These early garages had a setback elevator, which could not be seen on the façade. The elevator was used to move the cars. It brought them up to the upper floors, which usually included the repair shop.

In 1905, a new garage type emerged. It was the medium to high-rise multi-bay garage which expressed the elevator tower as part of the design. This new garage type did not pick up steam until 1913. Before that time, the non-elevator garages were the dominant garage types built in Manhattan. With the design emphasis placed on the elevator, the new typology moved toward a modern industrial aesthetic. The shift in formal design schemes can be seen in 150 West 83<sup>rd</sup> Street and 159 East 77<sup>th</sup> Street. [See Survey Pages 43 & 45] The two garages designed by George F. Pelham in 1910 and 1913 respectively use a tripartite scheme. The sides are emphasized by elevator towers with heavy ornamentation around the parapets. The central bays are marked by large window expanses with very little ornamentation. In addition, the base is clearly delineated from the upper stories. The same formal design scheme for the façade can be seen at the Ford Factory. [Plate 2.6] Designed in 1909 by Albert Kahn in Highland Park, Detroit, the Ford Factory's front façade is characterized by two large brick towers that have ornamented parapets. The Factory has a central bay marked by large window expanses with minimal ornamentation. It has a base separated from the upper stories by ornamentation.

Along with the Ford Factory, both 150 West 83<sup>rd</sup> Street and 159 East 77<sup>th</sup> Street were constructed by using reinforced concrete systems. The most popular framing system for garages in the early 1900s was the use of columns and beams that allowed for large uninterrupted spans for parking. This system also made it possible to get rid of load bearing walls, and allowed for

---

<sup>77</sup> (Helen Miller Gould Stable 1989)

larger bays and windows. Large wire glass windows let in more light, which made it easier for the staff to work. The inside of the buildings and exterior of these garages used very little ornamentation. Instead, the focus was on expressing the utilitarian function of the structures. Until 1930, the medium to high-rise multi-bay garage with elevator remained one of the dominant garage types built in Manhattan.

In 1916, another garage type emerged. It was the two-story garage, which would become the most prevalent garage type built during the 1920s. The two-story garage was typified by long horizontal openings, with a simple brick exterior and brick detailing. There were large entrances and exits to more easily move the cars on the ground floor. The second floor was characterized by large multi-paned awning windows, which lit the repair shop and extra storage space. While the elevator is not showcased on the façade of these garages, most of them used an elevator and turntable system to move the cars around.

Along with the garage design schemes evolving from their stable precedent to an industrial form from 1900 to 1930, the garage floor plan evolved as well. Four garage plan types are covered by the survey. They are the single elevator bay with residential, single elevator bay with storage and repair, single elevator bay with showroom garage, and ramp. [Plates 2.8, 2.9] The single elevator bay with residential is the first garage floor plan examined in the survey. It is linked with the garage type that is low to medium-rise tripartite without the elevator expressed. These garages had a layout similar to stable layouts, which contained a central entrance with storage for carriages on the ground floor. On the second level, they had a small ramp bringing the horses up to be housed in stalls. On the upper levels, there were offices and accommodations for chauffeurs and caretakers.

Garages showcasing mixed use single elevator bay garage and residential floor plans which had a precedent in stable design were 168 – 176 East 75<sup>th</sup> Street built in 1902, 55 East 90<sup>th</sup> Street built in 1904, and 407 Park Avenue built in 1916. [Plates 2.8, 2.9] The interiors of these structures have all been converted in the present day. Nothing of the interior configuration of these garages remains. On the exterior, they still have central entrances on the ground floor. When they were built, they had an office and a stairwell to the side that reached the second floor. The center of the interiors was left open for car storage. They had a drain for taking away dirty water after washing the cars. In the rear of these structures was the elevator that moved the cars to either the second level or the cellar for more storage. On floors two and three were quarters

that could be used by chauffeurs, mechanics, and servants. The quarters were composed of a kitchen, sitting room, bedrooms, bathroom, and a recreational room. Depending on the structure, there were accommodations for more than one family. This indicates that more than just the chauffeur lived in these early garages.

The second garage floor plan examined in the survey is the single elevator bay with storage and repair garage. This moved away from stable design. The single elevator bay with storage and repair garage is linked to the garage types that are medium to high-rise multi-bay without the elevator expressed, and the medium to high-rise multi-bay with elevator expressed. Examples of the single elevator bay storage and repair garage are 234 West 108<sup>th</sup> Street, 55 West 93<sup>rd</sup> Street, 137 West 89<sup>th</sup> Street, 9 West 100<sup>th</sup> Street, 4172 Broadway, 34 West 61<sup>st</sup> Street, and 205 West 101<sup>st</sup> Street. [Plates 2.8, 2.9] The single elevator bay storage and repair garage floor plan is characterized by an interior divided into bays formed by a series of columns and beams. Within the interior, there is an elevator core that is linked to the repair shop or machine shop. These shops were located on the upper floor. This was done to take advantage of natural light provided by windows and skylights. Each floor had drains that were needed for car washing, offices for staff that managed the cars, and a stairwell for pedestrian traffic. These garage plans were designed for efficiency, and they allowed the maximum amount of space for storing cars.

The third garage floor plan reviewed in the survey is the mixed use single elevator bay showroom garage. This is linked to the garage type that is medium to high-rise multi-bay without the elevator showcased formal scheme. Examples of the mixed use single elevator bay showroom garage floor plan were the Pope Manufacturing Company's Garage at 55<sup>th</sup> Street and Broadway, the Goelet Garage at 64<sup>th</sup> Street and Broadway, the 1906 Winton Garage at 70<sup>th</sup> Street and Broadway, and the Packard Garage at 61<sup>st</sup> Street and Broadway. [Plate 2.8, 2.9] All of these garages have been demolished. The floor plans for these garages were characterized by a showroom that faced the street to take advantage of the large windows that let in light. This positioning allowed people passing by to see the cars from the sidewalk. The actual entrances for the garages were on the side towards the rear of the structures. Directly in front of the entrances were elevator cores that moved the cars between the levels. Usually, directly in front of the elevator core were turntables to rotate the cars. This made it easier to reposition them for parking. Between the showroom and entrance elevator core on the ground floor were a set of



offices and waiting rooms for patrons and owners. The upper floors were characterized by a large open bay for storage, as well as offices along the walls.

The bay sizes in this floor plan are larger than in the single elevator storage and repair plan. The larger bays and separating of programs come from industrial architecture. Relating back to Albert Kahn's Ford Factory in Highland Park, the factory's programs had separate places within the building for manufacturing, storage, and offices. At the same time, garages like the Packard Garage at 61<sup>st</sup> and Broadway used a similar organizational set-up. The garage was divided into three sections – one for the display room, one for storage, and one for offices. The sections were separated from each other by partition walls. Each section contained its own stairwells and elevators. This interior organization in the factory and in the garages is expressed on the exterior of the buildings, which feature large glazed bays surrounded by minimal ornamentation.

The final garage floor plan examined in the survey is the ramp garage. This plan is linked to the medium to high-rise multi-bay without the elevator expressed formal scheme. An existing example of this type of garage is the New York Taxi-Cab Garage at 622 West 57<sup>th</sup> Street, and the converted Emery Roth Garage at 3 East 102<sup>nd</sup> Street. [See Survey Page 61] These early ramp garages addressed the need for an easier and more fluid circulation system. This overcame the problems of elevators breaking down, as well as only having limited space to handle a certain amount of cars at a single time.

In the New York Taxi-Cab Garage, the ramp runs alongside the rear wall. [See Plate 1.14] The entire front of the garage is left for storage. The entrance on the front façade is to the side, allowing for the length of the ramp. To the other side of the entrance is a long corridor made up of offices, which were used by the staff to manage the taxi service.

In the Roth Garage at 3 East 102<sup>nd</sup> Street, the ramp was in the center. [Plate 2.9] The ramp was used to connect the two separate floor elevations as the site is on an incline and this gave the architect the ability to divide the length of the building into two halves half a floor up from each other and to use two short ramps for circulation. On the top floor, there were quarters for a caretaker. The ground floor had a separate entrance and exit, as well as two offices. There were two stairwells – one near each of the offices. This helped with pedestrian circulation, and met a code requirement.

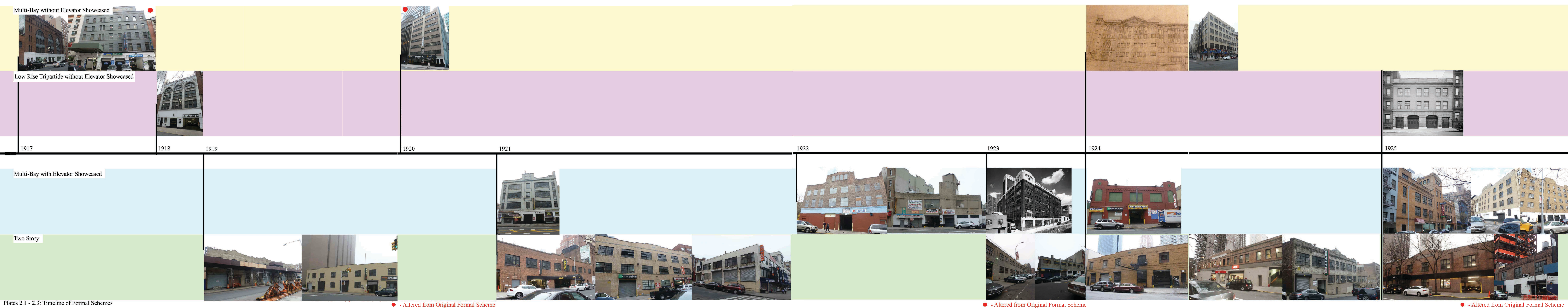
These two garages use different ramps, but they have many similarities. They both use reinforced concrete post and beam construction for the floor spans. The floors are laid out with a series of drains to catch water from washing, as well as to drain leaks from overflowing gas and oil. In addition, a separate area is quartered off along the walls for repair and maintenance of the automobiles. These ramp garages are specifically laid out for the ease of car circulation. This completed the evolution of the garage floor plan prior to 1930.

The range of garages examined in this survey shows the development of garage plans between 1897 and 1930. The survey provides greater insights regarding the varying functions, interior layouts and architectural styles of early garages. It showcases how the garage evolved from the stable to an industrial format. By gaining a better understanding of the garage's evolution through surveys such as this, it is my hope that this architectural type will garner greater respect and efforts to preserve historic garages will gain more advocates.

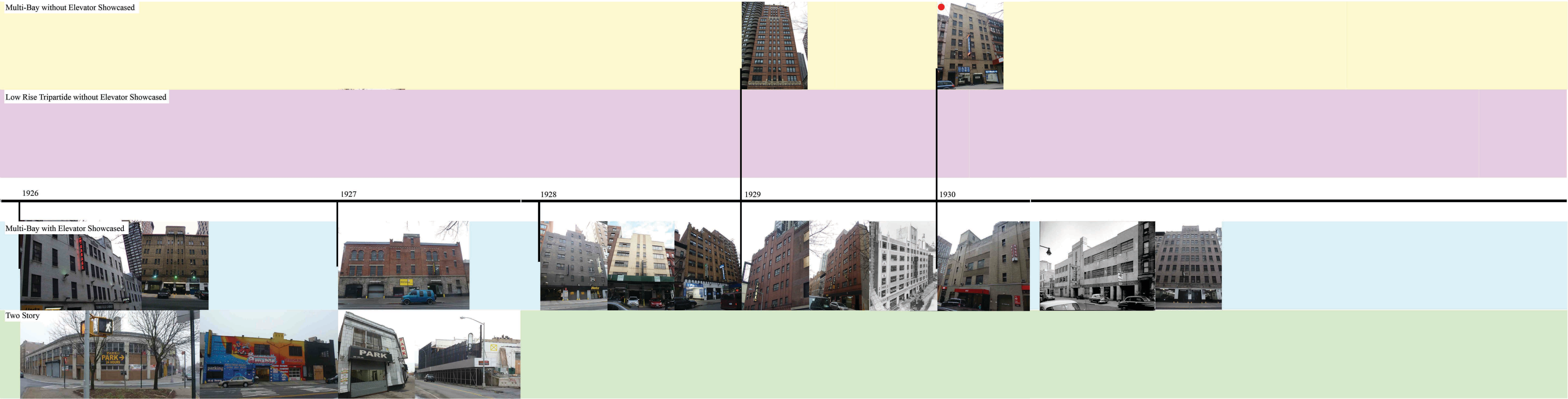












Plates 2.1 - 2.3: Timeline of Formal Schemes

● - Altered from Original Formal Scheme

● - Altered from Original Formal Scheme

● - Altered from Original Formal Scheme





**Plate 2.4:** Motorgate Roosevelt Island Garage built in 1974

Photograph By: Hilary Grossman, 2013



**Plate 2.6:**  
East 73<sup>rd</sup>  
Street  
Carriage  
House Row,  
built between  
1900 - 1902

Photograph By: Hilary Grossman, 2013



**Plate 2.5:** 167, 169, 171 West 89<sup>th</sup> Street designed by Frank A. Rooke in 1892

Photograph By: Hilary Grossman, 2013



**Plate 2.7:** Helen Miller Gould Stable designed by York and Sawyer in 1902

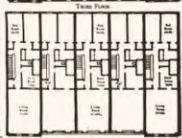
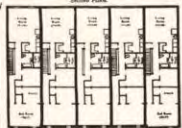
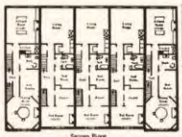
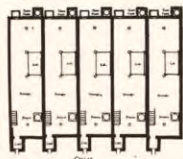
Photograph By: Hilary Grossman, 2013

**Plate 2.7:** Ford  
Factory designed by  
Albert Kahn in 1909 in  
Highland Park, Detroit



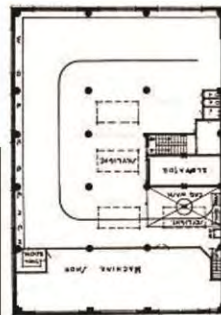
Photograph : Courtesy of Albert Kahn Architects, <http://www.mascontext.com/tag/ford>





1900

168 - 176 E. 75th St.



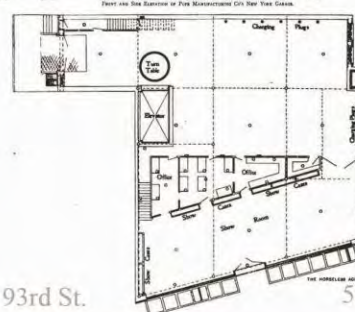
1902

234 W. 108th St.



1905

55 W. 93rd St.



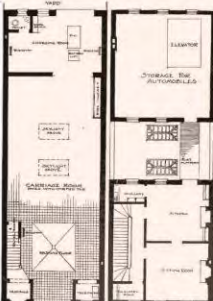
55th St. & Broadway

1901



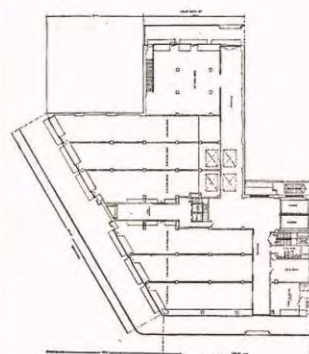
E. 58th St.

1904



55 E. 90th St.

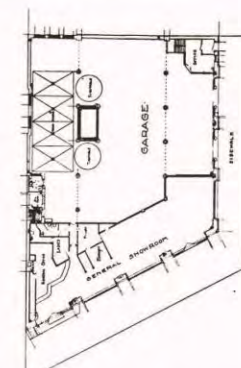
1906



64th St. & Broadway



247 W. 54th St.



70th St. & Broadway

Timeline of Garage Plans





1907

61st St. & Broadway



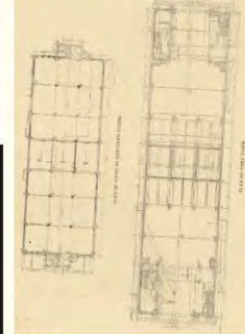
1912

9 W. 100th St.



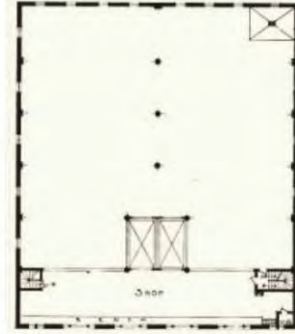
1916

407 Park Ave.



1929

34 W. 61st St.



1930

205 W. 101st St.

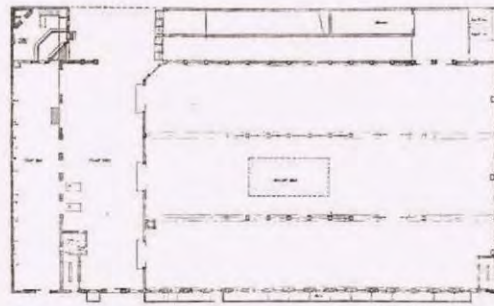
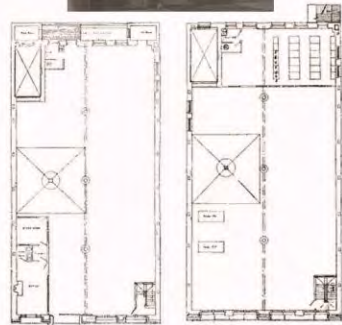
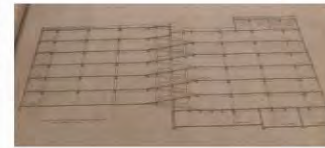
137 W. 89th St.



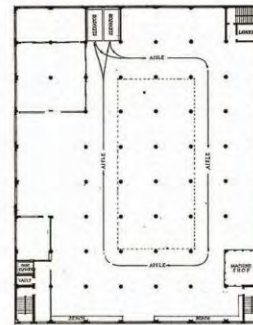
1908



1924



622 W. 57th St.



4172 Broadway

3 E. 102nd St.

Timeline of Garage Plans

## **Chapter Three: Significance**

### **Introduction:**

As of 2012, Manhattan has over 27,000 buildings with landmark status. This includes 107 historic districts, 1,304 individual landmarks, 114 interior landmarks, and 10 scenic landmarks. Of all these landmarks, there are five individual landmarked garages. While these garages are already protected under the New York City's Landmark laws their histories are not fully developed. In most of the designation reports the importance of the garage function in these buildings is largely overlooked. In the following introduction I discuss these buildings and how their histories can be enriched with a description of their role in the history of the garage.

The five garages that are individual landmarks are 177 East 73<sup>rd</sup> Street, [Plate 3.1] a historic garage still functioning as a garage, was designated as a landmark because it was part of a larger serial nomination in 1980 to designate the carriage house and stable row on East 73<sup>rd</sup> Street between Lexington and 3<sup>rd</sup> Avenue. The 177 East 73<sup>rd</sup> Street designation report states that, "it is a vital component of the unusual group of low-rise buildings on East 73<sup>rd</sup> Street between Lexington and Third Avenues that consists of carriage houses, residences, a stable, and this garage".<sup>78</sup>

Four other individual New York City landmarks that historically held garages were the Sophia Brothers Warehouse formerly at 34-41 West 61<sup>st</sup> Street, [Plate 3.2] the A.T. Demarest and Peerless Motor Car Company at 224-28 West 57<sup>th</sup> Street, [Plate 3.3] the U.S. Rubber Company at 1790 Broadway, [Plate 3.4] and the B.F. Goodrich Company at 1780 Broadway.<sup>79</sup> [Plate 3.5]

In addition, I will also discuss garages contained within historic districts. Historic district garages are cited for their architecture, not for their historic function as a car storage facility. This includes the Daniel Reid Garage at 168 East 70<sup>th</sup> Street [Plate 3.6], the Wertheim Garage at 65 East 70<sup>th</sup> Street, and the Bache Garage at 163 East 70<sup>th</sup> Street.<sup>80</sup> [Plate 3.7]

177 East 73<sup>rd</sup> Street [Plate 3.1], which was designated in 1980, is a Beaux-Arts style garage designed by Charles Hoppe. It was built in 1906 to serve the wealthy families who lived

---

<sup>78</sup> (177-179 East 73rd Street Building 1980)

<sup>79</sup> (B.F Goodrich Company Building 2009)

<sup>80</sup> (Upper East Side Historic District Designation Report, Volume 2 1981)



on or near Fifth Avenue. Still standing today, it is one of the earliest surviving garages in Manhattan. Featuring a striking limestone and granite base, 177 East 73<sup>rd</sup> Street has a three story brick mid-section with terracotta trim. It is capped by a mansard roof on the fifth floor. The mid-section has a recessed central bay composed of sheet metal framed and wire glass glazed windows similar to the design characteristics of commercial showrooms and manufacturing structures. The style and history of the development of East 73<sup>rd</sup> Street were extensively written about in the designation report, while the interior construction innovations of this garage were not included in the report.<sup>81</sup>

The interior of 177 East 73<sup>rd</sup> Street employed many of the latest construction techniques. Its concrete flooring system was covered with lead to protect against erosion from the leaking gasoline. The practice of covering concrete floors with lead started in the garage industry. Concrete construction technology was still developing at the time. As problems like erosion from leaking gasoline arose, new maintenance techniques were developed. 177 East 73<sup>rd</sup> was one of the first garages to employ the lead covering method. By doing so, the owners of 177 East 73<sup>rd</sup> Street were able to lower their insurance rates and upgrade the building's fireproof status.<sup>82</sup> More than just a well designed building and a prime example of an early commercial garage on the Upper East Side, 177 East 73<sup>rd</sup> Street is to be recognized for its fireproofing innovations. First and foremost, its innovative construction methods are an example of the evolving construction industry as it tried to catch up to the industrial building boom. With fireproofing of the utmost concern in the early 1900s, 177 East 73<sup>rd</sup> Street's construction pioneered early fireproofing techniques for garages.

34-41 West 61<sup>st</sup> Street [Plate 3.2], called the Sophia Brothers Warehouse, was originally the Kent Automatic Parking Garage. It was the first mechanized garage in New York when it was built in 1929. The garage's owner, Milton A. Kent, patented his own auto parking system. In this system, an electrical parking machine engaged cars by their rear axles and towed them from the elevator platform to parking spots. The system was designed to limit the number of people working in the garage, increase efficiency, and make the garage safer for users and cars by eliminating human error. Ultimately, the garage was a financial failure. It only operated as a garage until 1943, when it was converted into the Sofia Brothers Warehouse. The landmark

---

<sup>81</sup> (177-179 East 73rd Street Building 1980)

<sup>82</sup> (The Horseless Age 1906)

designation for 34-41 West 61<sup>st</sup> Street focuses on the stylistic expression of the architecture and on the history of the Sofia Brothers Warehouse, overlooking the failure of the mechanized garage and how that emphasized existing manned garage practices.<sup>83</sup>

224-28 West 57<sup>th</sup> Street [Plate 3.3] designed in 1909 by Francis H. Kimball for the A.T. Demarest and Peerless Motor Car Company, 1790 Broadway [Plate 3.4] designed in 1911 by Carrere & Hastings for the U.S. Rubber Company, and 1780 Broadway [Plate 3.5] designed in 1909 by Howard Van Doren Shaw and Ward & Willauer for the B.F. Goodrich Company<sup>84</sup> were all erected on Broadway between 42<sup>nd</sup> Street and 72<sup>nd</sup> Street. In the late nineteenth century, the area on Broadway above Times Square was considered the “carriage center”. As the carriage industry dwindled and car production increased, automobiles started to replace the horse, carriage, and harness business center on Broadway. This area became what is now called Automobile Row. By 1907, Broadway from 42<sup>nd</sup> to 72<sup>nd</sup> Streets was a strip of motor vehicle sales stores, as well as stores that served the motor vehicle industry. These included tire and auto part stores.<sup>85</sup>

These buildings, which combined showrooms, manufacturing areas, and storage, were among the early commercial garage enterprises. As a bonus for purchasing the car and using the company’s services, a buyer was given parking privileges. During the early years of the automobile, parking privileges were a real draw because of the limited amount of parking garages in Manhattan. In 1907, there were only eighty garages open.<sup>86</sup> This enticement to store your car at the dealership helped boost auto sales because the buyer did not have to deal with parking issues. This early storage system played a large role in the evolution of the car industry in Manhattan. In the early 1900s it was illegal to park on the street in Manhattan. By allowing parking garages, auto companies made it possible for auto owners to have an all encompassing service stop that included storage, repair, sales, and in some cases chauffeurs for hire. This made it more convenient, easy, and safe for car owners, who struggled with how to maintain and store their automobiles.<sup>87</sup> This purpose for early garages is left out of the designation reports for the structures located at Automobile Row. In leaving out this element, the New York City

---

<sup>83</sup> (Kent Automatic Parking Garage 1993)

<sup>84</sup> (B.F Goodrich Company Building 2009)

<sup>85</sup> (C. Gray, *Streetscapes: When Packards and Other Dinosaurs Roamed Broadway* 2006)

<sup>86</sup> (Fink 1970), 58

<sup>87</sup> (McDonald 2007), 50

Landmarks Commission is ignoring an important aspect of how garages impacted the development of the automobile industry in Manhattan.

168 East 70<sup>th</sup> Street [Plate 3.6], which is located in the Upper East Side Historic District, was built as a stable in 1901. It functioned as a joint stable and garage until it was completely converted to a garage in 1911.<sup>88</sup> According to the 1981 designation report, the structure is only cited as a building contributing to the District's significance due to its architect, C.P.H. Gilbert, and its Beaux-Arts architectural style.<sup>89</sup> This garage was designed for Daniel G. Reid, the "Tinplate King" of the early twentieth century. He had a net worth of approximately fifty million dollars. This structure cost him ninety-five thousand dollars to build. Its significance goes beyond being an important work of architecture. It is a site of historic merit because of its history as one of the early stable garage conversions.

Designed to look like a world-class stable<sup>90</sup>, the building stands three stories tall. It had space for fourteen carriages<sup>91</sup> on the ground floor, and a ramp going up to the second floor that contained room for another sixteen carriages.<sup>92</sup> The third floor had apartments for the chauffeur, mechanic, and servants. The structure contained a billiards room and bowling alley. It served as a place for leisure for Mr. Reid, as well as a garage. 168 East 70<sup>th</sup> Street was converted into a private school in 1926, and has operated as a school ever since.<sup>93</sup> The building is now the New York School of Interior Design, which took over the building in 1987. The structure's exterior maintains its original design despite its change in function.

168 East 70<sup>th</sup> Street established the precedent and design influence for other garages that would be erected on East 70<sup>th</sup> Street. 168 East 70<sup>th</sup> Street combined mansion design with stable design, making it harder to distinguish which part of it was a stable. Other garages followed suit, including 163 and 165 East 70<sup>th</sup> Street [Plate 3.7] for building owners Henri Wertheim and Jules Bache respectively. In addition, 168 East 70<sup>th</sup> Street served as the design precedent for the garage at 154 East 70<sup>th</sup> Street, which was erected for stockbroker Stephen H. Brown.<sup>94</sup>

It is remarkable that the automobile storage industry, which has played a large role in the culture, history and urban landscape of Manhattan, is so vastly underrepresented when it comes

---

<sup>88</sup> (Cornstock 1911), 60

<sup>89</sup> (Upper East Side Historic District Designation Report, Volume 2 1981)

<sup>90</sup> (C. Gray, *Streetscapes: For the Car, and Far From Pedestrian* 2010)

<sup>91</sup> Ibid

<sup>92</sup> Ibid

<sup>93</sup> (DOB Building Information Search 2013)

<sup>94</sup> Ibid



to New York City structures that have been landmarked. Even the little that is represented does not fully convey the full impact the garage and automobile industry had on Manhattan. The automobile would not have become so popular in Manhattan without the adequate infrastructure to support it. Garages, roads, and gas stations were central to this infrastructure, which enabled the car to compete with mass transportation options available in Manhattan. Auto sales faced a particularly strong challenge in Manhattan, which had an excellent trolley and subway system. In addition, mass transportation was much more affordable than owning a car. Without the infrastructure that made the car a more desirable, easier mode of transportation, Manhattan car sales would have been greatly depressed during the early 20<sup>th</sup> century.

We must preserve historic garages remaining in Manhattan before they are demolished. As part of my survey of Manhattan garages, from 50<sup>th</sup> Street to the northern tip of Manhattan, I have chosen sixteen garages that I believe particularly stand out. What follows are statements of significance, which focus on how Manhattan's early garages reflect the story of how both the auto industry and the construction industry evolved in the early 20<sup>th</sup> century. Reading the statements of significance for these buildings in combination with those for the already landmarked garages a complete picture of the history and development of the garage is shown.

### **55 East 90<sup>th</sup> Street (1904):**

55 East 90<sup>th</sup> Street [Plate 3.8] is an example of an historic garage that was adapted incorrectly. It was historically significant for numerous reasons, including that it was among the first purpose built, private garages in Manhattan. It was designed by Whitfield and King in 1904 for Andrew Carnegie. This garage was designed exclusively for the storage of five electric vehicles. The electric car was the most accessible and popular model of the time.<sup>95</sup> In 1891, electric vehicles became the first kind of automobiles available in the United States. The steam and gasoline powered cars became more widely available in 1902. These types of cars quickly gained popularity because they went further distances. In the 1920s, the electric car lost its popularity. They were overshadowed by the gasoline-powered automobile. Early garages stored three kinds of cars side-by-side. All early garages had charging stations, which catered to the popular electric car.<sup>96</sup>

---

<sup>95</sup> (Cornstock 1911), 49, 52

<sup>96</sup> (McDonald 2007), 16

This garage was a three-story building, which was located on a twenty-five foot by seventy foot lot. The façade was composed of Goodale marble and red Dutch brick. The garage contained a charging room with three charging panels at the rear of the ground floor and a hydraulic lift to remove the batteries from the cars<sup>97</sup>. The first floor was used for the storage and cleaning of the cars. It had space for five automobiles. The second floor, which was accessible by an elevator in the charging room, held “dead storage” for vehicles not in use. It also had accommodations for the chauffeurs and mechanics. The third floor was an extension of the quarters for chauffeurs and mechanics. The floors were lined with white vitrified tiles, and the walls were clad with semi-glazed brick. The stairwells were iron and marble.<sup>98</sup> [Plate 3.9]

Its architectural design reflected the precedent of stable design. The exterior had a large arched central doorway for the entrance of the vehicles. This was a feature of stable architecture, which was needed in order to have a large enough entryway to allow for the passage of a horse and carriage.<sup>99</sup>

To the left of the entrance was a separate entrance for the chauffeur that led up to his apartment. This is also a characteristic of stable architecture. Stables needed caretakers for the horses, and quarters were always included in the design of stables. The second and third levels took on the characteristics of a townhouse. These levels had small residential windows with ornamented window lintels and sills, topped by a large protruding cornice.<sup>100</sup>

Where 55 East 90<sup>th</sup> Street departed from the classic stable design was in its ornamentation. Its porthole windows on the first level were divided into panels in order to look like wheels. The wheel would later become the symbolic representation of the garage, replacing the horse heads for stables. This wheel motif can also be seen on the garages 512 East 74<sup>th</sup> Street and 204 West 101<sup>st</sup> Street.

55 East 90<sup>th</sup> Street, often called the Carnegie Garage, was a prime example of early private garage construction. It reflects how early garages adapted the stable design for the purpose of storing automobiles. In addition, 55 East 90<sup>th</sup> Street showcased the electric vehicle and how it once reigned supreme over gasoline powered and steam powered vehicles. This is particularly interesting now, in the early twenty-first century, when the electric car is making

---

<sup>97</sup> (Cornstock 1911), 52

<sup>98</sup> (Cornstock 1911), 49, 52

<sup>99</sup> (McDonald 2007), 13

<sup>100</sup> (Cornstock 1911), 49, 52

something of a comeback. For these reasons, this garage deserved a New York City landmark designation. The Carnegie Garage was converted to a nursery school<sup>101</sup>, and the top two floors were changed. Three more stories were added, bringing the structure up to six stories. All that remains of the garage is the ground level of the façade.[Plate 3.10] If the garage had been preserved correctly, it could have served as a model for how to store and care for the electric car. In the next chapter, I use this badly converted structure as an example of what to avoid for future adapted reuse of garages.

### **102 West 107th Street (1906):**

The four-story Atlas Garage [Plate 3.11] is a 42,800 square foot commercial garage built in 1906 for the Atlas Motor Company. It was designed by Fredrick C. Browne. The Atlas Motor Company was a car manufacturing company located in Massachusetts. It specialized in the runabout car, a small open auto that had a single row of seats. It also produced commercial vehicles. Functioning partly as a showroom for the Atlas Motor Company, it had storage for approximately 180 cars. This garage was written about in the *Horseless Age* magazine in May of 1907. It was cited for having the latest and most effective fireproof construction. The building is constructed out of brick on the exterior and of steel and cement on the interior. It featured a large swinging garage door for the entrance on the first floor, which had a showroom and offices. Upper floors were supported by steel columns. The columns were spaced far apart for support and to create large, open decks for parking on the upper floors. Every floor had a washroom for maintaining the cars properly, charging stations for electric cars, and toilets and telephones for garage staff. On the second floor, there were chauffeur lockers and a lounging room along with room for storage. The fourth floor contained a machine shop.<sup>102</sup>

Each floor could be accessed by a large electric elevator, which was located toward the front of the structure. The fourth floor of the structure was lit by large skylights, as well as numerous wire glass windows on the front facade. The use of wire glass in early garages was common. In 1914, Manhattan's Bureau of Combustibles adopted a new code mandating that wire glass was the only form of glass that could be used in garage construction.<sup>103</sup> Wire glass was the preferred choice due to its fire resistant features. Wire glass does not shatter or break under

---

<sup>101</sup> (C. Gray, *Streetscapes: Former Garages; A Mansion for Me, Another for My Cars* 2009)

<sup>102</sup> (Recent Garages and Garage Methods 1907)

<sup>103</sup> (Jakle and Sculle 2004), 119



stress, or when exposed to high temperatures. It keeps the fire contained indoors. The structure was heated with steam heat. In the basement, there were sealed steel tanks that contained oil for the cars. In the back was a separate shelter for gasoline storage.<sup>104</sup> The efficient layout and storage methods for the gas and oil helped the owners of 102 West 107<sup>th</sup> Street get a low insurance rate. This helped the garage owners maximize their profits.

Stylistically, 102 West 107<sup>th</sup> Street was one of the first garages to express the elevator in its design. The Atlas Garage's original design was characterized by a red brick façade with brick detailing and cornice above the fourth floor. On the ends of the façade are rectangular bays that rise past the height of the building. The rectangular bays are emphasized by quoins lining the edges of the bays. Behind the bays are the elevators that move the automobiles. The central bay is characterized by a pediment roofline. Since the garage has been built, the cornice has been removed. Otherwise, the façade is largely intact.

In 1915, the garage was leased by the Royal Garage Company. William Haradon owned this company. 102 West 107<sup>th</sup> Street became the second garage in this company's growing chain. Its counterpart was at 211-215 West 95<sup>th</sup> Street. The Royal Garage was known for its excellent business practices, and for the efficient and honest way it ran its auto storage system. The Royal Garage staff did a very good job of noting each car's arrival and departure times, which were recorded on time cards. It kept a strict call log that detailed when owners called for their cars. They aligned this log with the time cards to ensure that chauffeurs were not taking joy rides. During this time, the garage industry was under attack for corrupt practices, poor management, and chauffeurs having too much power within the industry. The Royal Garage advertised its strict business regulations in the *Horseless Age* magazine in August of 1915. In this way it acted as a leader in presenting the garage industry in a positive way.<sup>105</sup>

Still functioning as a garage today, 102 West 107<sup>th</sup> Street stands as an example of an early garage and for its leadership to improve garage industry practices. In addition, it stands as an example of the early garage industry's move toward standardization. Lastly, the Atlas Garage was one of the first garages to stylistically express its interior. After passing through other garage operating companies in 1922, it was sold for six hundred thousand dollars to the Atchinson

---

<sup>104</sup> (Recent Garages and Garage Methods 1907)

<sup>105</sup> (Where System Pay in a Modern Garage 1915)

Garage Corporation.<sup>106</sup> It is now being operated by the Oliantha Garage Corporation. 102 West 107<sup>th</sup> Street is living proof that early garage construction is still viable for present day purposes.

### **214 West 80<sup>th</sup> Street (1906):**

The Apthorp Garage [Plate 3.12] was erected in 1906. It was designed by C.B. Brun as a combination parking garage and auto dealership for the Palace Garage Company. It has storage space for 115 cars. The garage was named after Charles Ward Apthorp, a wealthy landowner on Manhattan's West Side who owned the land where the garage was built. The original operator of the garage was Morris Segall, president of the Palace Garage Company and later the Apthorp Garage Company. Mr. Segall hired local architect Clement Benjamin Brun to design the garage. Mr. Brun had a short-lived career as an architect. He only designed fifteen buildings between 1905 and 1916. In 1923, Mr. Brun switched careers to become a chiropractic doctor. None of his other buildings exist today. The two other garages he designed - 213 W. 82<sup>nd</sup> Street and 207 W. 98<sup>th</sup> Street – have been demolished.<sup>107</sup>

Under Mr. Segall's management, the Apthorp Garage flourished. In addition to running the garage, Mr. Segall was the organizer of the Metropolitan Garagemen's Board of Trade and was a member of the West Side Neighborhood Improvement Committee. He was committed to running an efficient and neighborhood friendly garage.<sup>108</sup> Mr. Segall established standard fares for the garage. He worked with local businesses and neighborhood groups to make sure that residents and workers always had a place to park. The garage operated by renting out spaces. In 1914, it cost thirty-five dollars a month to rent a space for a touring car, roadster, or runabout car. It cost forty dollars a month for closed cars. Mr. Segall led the effort to move garages out of the gas business, and for them to focus purely on storage. He stated that it was more financially sound to focus on charging for storage then on gas because gas had very little profit margin.<sup>109</sup>

During the garage's lifespan, a separate corporation was formed in 1908. It was called the Apthorp Motor Car Company. This company signed a deal to handle the distribution and sales of the Kissel Motor Car Company's three latest motor vehicle models. These Kissel Kar [Plate 3.13] models were initially to be sold exclusively in the New York metropolitan area at the

---

<sup>106</sup> (\$600,000 Garage Lease 1922)

<sup>107</sup> (Grutchfield n.d.).

<sup>108</sup> Ibid

<sup>109</sup> (Gas for 16 Cents at the Garage 1914)

Apthorp Garage. The partnership only lasted a year, and in 1911 the Apthorp Motor Car Company was dissolved. This forced the Kissel Kar to be sold elsewhere in New York City. But, the Apthorp Garage Company continued operating past 1911. It owned this garage until 1981, when the garage was sold to new owners and became the Dana Garage. In 2002, 214 West 80<sup>th</sup> Street became part of the Edison Park Fast chain. In 2012, it was bought by the Central Parking System.<sup>110</sup>

Still standing today, 214 West 80<sup>th</sup> Street is an example of how an early commercial garage evolved into a garage that successfully meets current standards. The interior has been rearranged to hold 195 cars. The showroom and repair shop have been removed. Operating as a garage throughout its entire history, it holds up to one hundred and ninety-five cars presently. By 1906, enough New Yorkers owned automobiles that commercial garages began to be erected in residential neighborhoods such as the Upper East Side and Upper West Side. These early commercial garages had multiple functions. They were used as an auto dealership/showroom, gas station, repair shop, and place for storage.<sup>111</sup> Today, garages are limited to storage and repair work. 214 West 80<sup>th</sup> Street, which is now purely a storage garage, once provided all four multiple functions offered by garages in the early 1900s.

In addition, 214 West 80<sup>th</sup> Street is one of the earliest commercial garages erected in Manhattan. This makes it one of the oldest standing garages in the city. Beyond its age and the continuation of its evolving function, this garage stands as the last remaining building designed by Clement Benjamin Brun.<sup>112</sup> The Beaux-Arts designed garage incorporated broad, expansive windows that occupy most of the structural bay with minimal ornamentation. The windows are set into a stone carved façade. Above the entrance is a limestone carved emblem with the address and name of the garage. In the original design, the garage had a cornice that has since been removed. Otherwise the garage is intact programmatically and aesthetically. For all the reasons cited, it deserves to be preserved.

### **137 West 89<sup>th</sup> Street (1906):**

The Monterey Garage is one of New York's earliest commercial automobile garages. It was built in 1906 along with two other commercial garages that opened the same year. These

---

<sup>110</sup> (Grutchfield n.d.)

<sup>111</sup> (McDonald 2007), 18

<sup>112</sup> (Grutchfield n.d.)



two garages were 214 West 80<sup>th</sup> Street designed by C.B. Brun for the Palace Garage Company, and 102 West 107<sup>th</sup> Street designed by Fredrick C. Browne for the Atlas Motor Company. Originally called the Acton Garage [Plate 3.14], the Monterey Garage was designed by Lafayette A. Goldstone for William C. Strange Junior.<sup>113</sup> Goldstone was a prominent and prolific New York architect. Mr. Goldstone started his career designing row houses like 13 – 41 West 85<sup>th</sup> Street, and stables like the Saks & Co. on West 36<sup>th</sup> Street. In 1906, his career took off. When he was designing the Acton Garage, he had five other commissions. Later in his career, Mr. Goldstone partnered with William Rouse. They worked together from 1909 to 1926. Specializing in apartment house design, their firm's most acclaimed project was 1107 Fifth Avenue.<sup>114</sup>

At the time of its construction in 1906, the Acton Garage was considered a modern and stylish garage. It was called up-to-date and given good reviews by the *Architects' and Builders' Magazine*, as well as in the 1911 book *Garages and Motor Boat Houses*. Designed in the high style of the day, the Beaux–Arts style, the five-story Acton garage featured a stone base with a brick façade and heavy ornate cornice.<sup>115</sup> As of 2013, the cornice has been removed and replaced with a cast stone plaque with the name Monterey Garage on it.

Mr. Goldstone designed the interior to have the maximum amount of floor space. He used reinforced concrete for the floor and ceiling. Goldstone designed the two concrete enclosed offices on the ground floor so that they hung from the ceiling. This made it possible to have space underneath for storage. The offices were reached by an iron stairwell. The floor slabs were supported by three structural ionic columns. Tucked in the northwest corner of the structure was an elevator, with a six ton carrying capacity, which brought cars from the ground floor to the upper levels. Every level had a drain on the west side, which was needed for the daily cleanings that every car would receive. Every floor featured drop lights ten feet apart, and compressed air tubes for inflating tires. The garage had a repair shop and chauffeurs' lounge on the upper levels.<sup>116</sup> [Plate 3.15]

Following all the requirements of the New York Board of Fire Underwriters, the Insurance Exchange, and the Bureau of Buildings, the structure was built with absolutely

---

<sup>113</sup> (Dolkart, *The Acton Garage, Now the Monterey Garage: A Preliminary Investigation of Its History and Architecture* 2002)

<sup>114</sup> (Goldstone and Goldstone 1964)

<sup>115</sup> (Dolkart, *The Acton Garage, Now the Monterey Garage: A Preliminary Investigation of Its History and Architecture* 2002)

<sup>116</sup> (Cornstock 1911), 80

fireproof construction methods. Its construction was considered so secure that the Acton Garage had the lowest insurance rate of any garage erected at that time. To ensure its fireproof construction, the Acton Garage was the first to install a Spencer turbine suction cleaner. This cleaned up all the oil and gas that often soaked into the floors. In addition, there was a separate oil room with patented pumps. The oil was stored in a brick vault sixteen feet below the curb. The gasoline pits, boiler room and motor room were sixteen feet below the curb to ensure safety against fires<sup>117</sup>.

The building remained the Acton Garage until 1950, when it changed ownership and became the Monterey Garage. It came under threat in 1962, when it was seized by the City of New York as part of the Upper West Side Urban Renewal Plan. The Plan expired in 2002 when the building was put up for sale by the City. Kenny Mance, whose family ran the garage from the 1950s until it was seized in 1962, got control of the garage once again in 2002.<sup>118</sup> The garage is near a row of landmarked buildings to the west. This includes the Claremont Stables at 175 West 89<sup>th</sup> Street, which opened in 1892 as a commercial livery stable and was designated as a New York City landmark in 1990.<sup>119</sup> It was Manhattan's last functioning stable until it closed in 2007. The building was bought by the Stephen Gaynor School in 2010 for \$12 million. This middle school did a \$40 million renovation to convert the stables into classrooms. The building reopened in 2012.<sup>120</sup>

Between the Claremont Stables and the Acton Garage are three small buildings that were built in 1892 as private carriage houses. Their addresses run from 167 to 171 West 89<sup>th</sup> Street. The Claremont Stables and the three small carriage houses have also been listed in the New York State Register of Historic Places and the National Register of Historic Places.<sup>121</sup> Unfortunately, the Acton Garage has no local landmark status to protect it. The designation would provide a complete written history of the different types of early transportation buildings that were found in residential neighborhoods of Manhattan. In addition to the role the Acton Garage played on West 89<sup>th</sup> Street, it is one of the oldest existing commercial garages in the country. It is an

---

<sup>117</sup> Ibid

<sup>118</sup> (Lee 2003)

<sup>119</sup> (Dolkart, *The Acton Garage, Now the Monterey Garage: A Preliminary Investigation of Its History and Architecture* 2002)

<sup>120</sup> (Claremont Riding Academy 2013)

<sup>121</sup> (Dolkart, *The Acton Garage, Now the Monterey Garage: A Preliminary Investigation of Its History and Architecture* 2002)

example of the effective use of early fireproof construction methods, and remains one of the surviving, well-designed architectural works of Goldstone.

### **622 West 57<sup>th</sup> Street (1908):**

At the time of its construction in 1908, the New York Taxicab Company's Garage [Plate 3.16] designed by F.M. Andrew & Co. was the largest garage in America. The garage was built for the sole purpose of storing and operating the New York Taxicab Company's cabs. This four-story garage has a full basement. It is a red brick structure measuring 225 feet long and 145 feet deep. It was the first garage that featured an interior ramp system for cars to access all levels. Called "inclined runways"<sup>122</sup>, these ramps went from floor to floor all the way up to the fourth floor. The ramps were made possible by improvements in concrete construction. New reinforcement measures increased the allowable loads, which enabled them to hold greater weight while making them longer. The basement was accessed by elevators in the rear. Each floor featured a washing platform, fireproof dividing bays, and other mechanical devices used to help handle cars.

The first floor held 175 cars, and had offices for employees. The second and third floors were solely for storage of cabs. These floors were divided into four bays by three fireproof partitions. If a fire broke out, the partitions would keep the fire contained and limit the overall damage to the garage. The fourth floor was used for "dead" storage of cars, as well as for a repair shop. Two elevators ran up to the fourth floor, and down to the basement for pedestrian access. The garage held up to seven hundred cars. Beyond the new interior system, the garage featured several construction innovations. The New York Taxi-cab Company Garage was the first building to use Bethlehem rolled section beams to support spans of up to forty feet.<sup>123</sup> It also featured a new system for storing gasoline. The gasoline tanks were encased in solid concrete, and sunk into a pit twelve feet deep and twenty-five feet away from the structure. Eight tubes ran out of the tank and went to a separate enclosed structure, where a funnel was added to dispense gas. When not in use, the tubes were disconnected and the tank was closed.<sup>124</sup>

Still standing and functioning as a commercial garage operated by GMC Parking, the New York Taxi-Cab Garage was an architecturally celebrated building when it was erected. Both

---

<sup>122</sup> (Cornstock 1911), 88

<sup>123</sup> (Cornstock 1911), 89

<sup>124</sup> (Cornstock 1911), 88



the *Horseless Age Magazine* and *Garages and Motor Boat Houses* hailed it for its use of ramps and extensive holding capacity. While the exterior of the building is unremarkable, the interior innovations and construction practices it helped develop makes 622 West 57<sup>th</sup> Street a landmark-worthy garage. As one of the first ramp garages in the United States, and the first in Manhattan, it laid the groundwork to popularize the ramp garage around the greater New York metropolitan area.

### **147 West 83<sup>rd</sup> Street (1908):**

Cedarhurst Motor Livery Company built, owned, and operated 147 West 83<sup>rd</sup> Street [Plate 3.17] as a “motor livery” and taxi-cab enterprise when it opened in 1908. Motor livery was a common term for describing the storage of automobiles. The term garage was not popularized until 1910. The term livery was historically a common term that was used for stables. In the transition from the horse carriage to the automobile, early garages were called auto houses or liveries. The building was designed using orange red brick with stone detailing. The cornice is composed of terracotta with a central plaque featuring the company’s logo. The garage features horse heads above the entrance, which symbolizes the company’s history as stable operators.<sup>125</sup>

The Cedarhurst Company was incorporated to operate a new taxicab service that would feature Nicolas-Frayer Miller cabs.<sup>126</sup> [Plate 3.18] The service was a private enterprise. It had no business being done from stands on the streets. Offering state-of-the-art taxi-cabs, the Nicolas-Frayer Miller cabs had Quinby & Co. aluminum bodies, Michelin tires, and a 24-horsepower four-cylinder engine. The cabs were finished in a Brewster green and black design, with black upholstery and oxidized brass work for the mechanics of the car. This included the stick shift. The company started small with five cabs in operation in 1908. It expected to have twenty more in use by later that year. The Jones taximeter was used, and fares were computed in line with other taxi companies in Manhattan.<sup>127</sup>

The motor taxicab had been around since 1897, when The Electric Carriage and Wagon Company began operating twelve electric hansom cabs [Plate 3.19] in July of that year. A hansom cab is a two wheeled horse drawn covered carriage with the driver’s seat behind the passengers. The electric hansom cabs used the same body type as the hansom cabs, but there was

---

<sup>125</sup> (Another New York Taxicab Enterprise 1908)

<sup>126</sup> (Another New York Taxicab Enterprise 1908)

<sup>127</sup> (New Frayer-Miller Cab 1908)

an electric engine inserted in place of the horses. Competing with horse drawn carriages as the primary form of transportation during this decade, there were one hundred taxicabs on the streets of New York by 1899. In 1907, the New York Taxicab Company imported six hundred cars from France. Powered by gasoline, these red and green paneled cars soon gained popularity due to the taximeter that gauged miles traveled and time elapsed. This provided customers with fair prices for their travel.<sup>128</sup> The same year, D. P. Nicholas & Company, a Massachusetts based manufacturing company, began working on the production and manufacturing of gasoline powered taxi-cabs. These cabs would later become known as the Nicolas-Frayer Miller hansom cab. The company began servicing the commercial market in 1908. The Nicolas-Frayer Miller cab quickly became a major competitor for the New York Tax-Cab Company.<sup>129</sup> By 1910, there were half a dozen large fleets of cabs and thousands of independent cabbie operators in Manhattan.<sup>130</sup>

In 1922, the building was leased as an auto service and repair shop by Francis Sheridan. He made multiple alterations to the interior of the building.<sup>131</sup> Today, the garage operates as an Avis car rental hub. Still maintaining its exterior design, the Cedarhurst Motor Livery features a terracotta plaque with its name cast onto it. The garage is an icon of the emerging taxi industry in the early 1900s. 147 West 83<sup>rd</sup> Street is one of the last buildings in New York still displayed as a livery, which gives it a special place in the city's streetscape.

### **159 – 165 East 77<sup>th</sup> Street (1913):**

George F. Pelham was hired to design a garage for the Ardsley Garage Company in 1913. The garage, located at 159 – 167 East 77<sup>th</sup> Street, was built that same year. [Plate 3.20] Pelham designed a five-story brick and terracotta fireproof garage.<sup>132</sup> A prolific New York architect, he started his architecture firm in 1890. Throughout his career, Pelham designed apartment houses, hotels, row houses, and commercial buildings. He also designed another garage at 150 West 83<sup>rd</sup> Street. [See survey page 43 for additional information] His use of styles was eclectic, and his designs ranged from Renaissance Revival to Gothic Revival to Colonial Revival. With a career lasting over forty years, his prominent works include the Central Hanover Bank and Trust

---

<sup>128</sup> (Taxi History n.d.)

<sup>129</sup> (New Frayer-Miller Cab 1908)

<sup>130</sup> (Taxi History n.d.)

<sup>131</sup> (With the Wholesalers and Retailers- New York 1922)

<sup>132</sup> (Contemplated Building Operations 1913)

Company Building erected in 1929 at 960 Sixth Avenue, the Chalfonte Hotel constructed in 1927 at 200 West 70<sup>th</sup> Street, and a boutique he designed in 1906 at 67 Riverside Drive.<sup>133</sup>

For the Ardsley Garage, Pelham's design was influenced by Louis Sullivan's architecture. He mixed Sullivan's style with industrial design features to create a monumental garage. Five-stories tall, the garage has large glazed wire glass industrial window bays in a terracotta facade. Vertically the façade is divided into five bays. The two side bays and central bays are narrower in width and topped by an arch on the sixth floor. The cornice is made of ornate pre-cast terracotta blocks with a geometric pattern cast into the side turret. The garage's elaborate design stands as a significant piece of architecture by a prominent New York architect.

In addition, this is an example of a car manufacturing company's connection to the garage industry. Car manufacturing companies were the first to erect commercial garages. The Ardsley Motor Car Company was a car manufacturing company founded in 1905.<sup>134</sup> Located in Yonkers, New York, the Ardsley Motor Car Company was a short-lived automobile manufacturer. From 1905 to 1906, the Ardsley Motor Car Company produced the Ardsley car, designed by W.S. Howard. It was a 35-horsepower, four-cylinder car that could seat up to five people. [Plate 3.21] After 1906, the company stopped producing cars. It focused on car parts that could be used on multiple car models.<sup>135</sup> The last listing found for the company was in 1921. The Ardsley Garage Company was an offshoot of the failed motor car company's attempt to bring in more business. Ardsley Motor Car Company's small lifespan followed the trend of most car manufacturing companies of the time. The average lifespan for a car manufacturing company in the early twentieth century was only seven years. The garage still stands as a testament to a time when car manufacturing in New York was in its heyday, and numerous car companies emerged to meet the growing demand for automobiles and automobile parts.

### **Post-1916 Zoning Resolution Micro-District Garages:**

After the 1916 Zoning Resolution was passed by the New York City Department of City Planning, new garage construction became clustered to form micro-parking districts. [Plate 3.22] Two of these districts still existing today are East 94<sup>th</sup> Street between Third Avenue and Second Avenue, and West 101<sup>st</sup> Street between Broadway and Amsterdam Avenue. The East 94<sup>th</sup> Street

---

<sup>133</sup> (Dolkart, George F. Pelham n.d.)

<sup>134</sup> (Where to Get Part for Orphan Cars 1917)

<sup>135</sup> (Phillips 2011)



micro-district is made up of 231 East 94<sup>th</sup> Street [Plate 3.23], designed by John DeHart in 1926, and 243 East 94<sup>th</sup> Street, designed by Nathan Rotholz in 1925. [See Survey Page 67] These are two commercial white brick garages. The West 101<sup>st</sup> Street micro-district is made up of 204 West 101<sup>st</sup> Street, designed by Emery Roth in 1926, and 205 West 101<sup>st</sup> Street, designed by William Shay in 1930. These are two brown brick, commercial garages.<sup>136</sup> [See Survey Pages 68, 75] These micro-districts are on the borders of what was then newly outlined business and residential districts. Unable to be erected in residential areas, they were erected just outside the borders of these areas in order to service the surrounding residential communities.<sup>137</sup>

These new garages followed set design guidelines and business practices. Each garage held space for storage, repair, and sales of supplies and accessories. The garages were designed with a ramped entrance and exit. Between the entrance and exit are two elevators. One elevator brings the cars up and the other one brings them down. The ground floors were designed with a double height ceiling to showcase the higher-end cars, and provide comfort for the owners. Along with the elevators for the cars, additional pedestrian access was provided by stairwells at either end of the garage floor. The front sections of the garages on the side facing the street were designed to hold all the other programs besides storage. This is where the repair shop, chauffeur lockers, supply rooms, and offices were placed. The option for dead storage was still offered, but there was declining interest in this service because cars were being built better. Therefore, dead storage was put in the most inaccessible areas, including the basement or rear of the top floor. In addition, the top floor always had the repair shop to take advantage of the natural light supplied by skylights and windows.<sup>138</sup>

In the case of the East 94<sup>th</sup> Street micro-district, the two remaining buildings at 231 and 243 East 94<sup>th</sup> Street were part of a larger district. The block was once lined with garages, including the Courtlandt Garage at 138 East 94<sup>th</sup> Street that was erected in 1919, a one-story garage designed by Louis E. Dell at 209 East 94<sup>th</sup> Street that opened in 1914, and a two-story and basement garage erected in 1917 at 304 East 94<sup>th</sup> Street. All of these garages have been demolished. The Dell Garage at 209 East 94<sup>th</sup> Street served as the starting point for the micro-district that was built around it post 1916 zoning.

---

<sup>136</sup> (C. Gray 2012)

<sup>137</sup> (Building Zone Resolution 1916)

<sup>138</sup> (Heldt 1915)

231 and 243 East 94<sup>th</sup> Street were bought in 1931 by a syndicate that combined the two structures. Originally 231 East 94<sup>th</sup> Street was erected for and run by the Binshore Garage Company, while 243 East 94<sup>th</sup> Street was erected for and run by the private businessman, Ringland Kilpatrick. A syndicate bought the buildings and converted them into the Yorkville Garage, which is how it is known today.<sup>139</sup>

Prolific garage architects designed 231 and 243 East 94<sup>th</sup> Street and 205 West 101<sup>st</sup> Street. John DeHart, the architect of 231 East 94<sup>th</sup> Street, designed seven other garages in Manhattan between 1920 and 1925. All of them have been demolished. Nathan Rotholz, architect of 243 East 94<sup>th</sup> Street, designed ten other garages in Manhattan between 1919 and 1931. Likewise, all of them have been demolished. William Shary, architect of 205 West 101<sup>st</sup> Street, designed six other garages in Manhattan between 1924 and 1930. This included 421 East 91<sup>st</sup> Street, which was erected in 1925.<sup>140</sup> [See Survey Page 64] It is the only other garage Shary designed that is still standing. These local architects specialized in garage and warehouse construction. Their designs helped in establishing a modern garage design. These architects strayed away from stable design. They were influenced by industrial architecture when designing these garages. The architects adapted the use of large industrial windows that let in the maximum amount of light. They emphasized the elevator shaft on the façade, and used brick ornamentation to highlight the levels of the garage on the façade.

The micro-districts still existing today on East 94<sup>th</sup> Street and West 101<sup>st</sup> Street are a result of the 1916 Zoning Resolution. No garage was allowed in a residential zone. Garage business catered to the residential zones, which created the need to put garages on the edges of these zones. Regardless of their ownership, commercial garages all offered similar services after 1916 in order to maximize their profits. They all featured similar floor plans and designs. The result is the standardization of garages in the post-1916 years.

### **337-343 East 64<sup>th</sup> Street (1917):**

Hunt and Hunt designed 337-343 East 64<sup>th</sup> Street in 1917 for the Co-Operative Building Construction. These well-known architects used tapestry brick and large arches for this building's construction. [Plate 3.24] They mixed the Romanesque Revival style with industrial

---

<sup>139</sup> (C. Gray 2012)

<sup>140</sup> Ibid

design characteristics. The building features three large central arched bays with cast iron framed window insets. The bays are framed in brick. There are circular rosettes made out of brick between the arches. The structure is topped by a brick parapet supported on a series of small arches.

Richard Howland Hunt and Joseph Howland Hunt formed their own firm in 1901. Sons of the late Richard Morris-Hunt a world-renowned architect who designed the Metropolitan Museum of Art after his death the brothers finished the commission. Their architectural practice lasted until Joseph's death in 1924. The brothers are primarily known for their residential work, which includes Beaux-Arts houses on Fifth Avenue and residences in Long Island and in Tuxedo Park, New York.<sup>141</sup> 337-343 East 64<sup>th</sup> Street is a rare example of Hunt and Hunt's non-residential architecture. Other non-residential buildings they designed were the Armory for the 69<sup>th</sup> Regiment in 1904, the office building 373 Fifth Avenue in 1906, and the police station at 100 Old Slip that was built in 1908.

This garage has a checkered history. In the 1920s, it was used for tobacco storage before being turned back into a garage in the 1930s.<sup>142</sup> In 1957, it had a massive floor collapse that crushed eleven cars and hurt three people.<sup>143</sup> Two of the cars that were crushed were a 1928 Hispano-Suiza and a 1928 Bugatti, indicating that the clientele of the garage were wealthy. It still stands today as a working garage that is leased to New System Garage.

Despite its checkered history, the garage has remained largely intact. It possesses most of its original fabric. The base was altered in the 1980s to incorporate new openings and to widen the existing entrance. The interior has been re-organized due to the floor collapse in 1957. Otherwise, the upper four stories are intact. They still show their original Hunt and Hunt design. 337 East 64<sup>th</sup> Street is an example of a garage that has been preserved primarily through neglect. Without the pressing need to update the building, the owners have maintained its historic qualities. Therefore, the garage still symbolizes the amount of pride and prestige that went into these early garages, which were designed by renowned architects.

### **3-17 East 102nd Street (1924):**

---

<sup>141</sup> (Richard Howland Hunt n.d.)

<sup>142</sup> (PINCHOT BUYS GARAGE.: Five-Story East Side Structure Acquired for Investment 1925)

<sup>143</sup> (3 Hurt in Crash of Water Tank: 11 Rare Old Cars Damaged as Storage Tower Plunges Through Garage Roof 1957)



Emery Roth designed this garage in 1924. [Plate 3.25] It was a four-story, automobile service, storage and repair garage. Measuring one hundred feet by two hundred feet, the garage cost 1,250,000 dollars with equipment.<sup>144</sup> Roth was a prominent New York architect. He was primarily known for his hotels, including the Hotel Belleclaire at 250 West 77<sup>th</sup> Street that he designed in 1903, and the Warwick Hotel at 65 West 54<sup>th</sup> Street that he designed in 1927. He also designed critically acclaimed apartment buildings like the Beresford, designed in 1929, and other apartment buildings designed in the 1920s and 1930s.

He designed the garage at 3-17 102<sup>nd</sup> Street by using an Arts and Crafts motif with Beaux-Arts ornamentation. On the interior, Roth designed a central ramp system that connected the two elevations on which the garage was built.<sup>145</sup> New York was one of the few cities not to fully incorporate the ramp garage as the primary circulation in the 1920s. This is because New York did not have the space for the lengths needed to build ramp garages. Ramps required more square footage, and provided fewer parking spots. Ramps were preferred outside the city because they were easier to navigate for self-service. Originally, Roth's garage stood out as one of the few ramp garages ever erected in New York. In 1968 it was been converted to a garage and medical facility that is part of the Mount Sinai Medical Center. [Plate 3.25] Before this conversion, it was turned into a warehouse and factory in 1945.

Built near the Mount Sinai Medical Center, the garage was erected at the same time as the area was being developed in the late 1920s. Up until 1924, 96<sup>th</sup> Street was considered the cut off for wealthy residential and commercial ventures along and near 5<sup>th</sup> Avenue. In 1924, developers started to buy land for the development of the area. Most of the speculation was that garages would be built in the area to service the hospital, Mount Sinai which was built in 1904 at 1190 Fifth Avenue, and residential communities further east. Following the erection of 3-17 East 102<sup>nd</sup> Street in 1924, the first residential apartment complex, 1212 Fifth Avenue, was erected within the vicinity. In 1928, two more residential apartment buildings were erected. They were located at 1215 Fifth Avenue and 1200 Fifth Avenue, which was also designed by Emery Roth.

3 – 17 East 102<sup>nd</sup> Street played a vital role in developing the neighborhood.<sup>146</sup> This garage showcased how the building of garages in the 1920s was a way to bring about more residential development and create jobs for the community. They were an important component

---

<sup>144</sup> (DOB Building Information Search 2013)

<sup>145</sup> (Roth 1924)

<sup>146</sup> (C. Gray, STREETSCAPES: UPPER FIFTH AVENUE; Way Uptown in Hospital Country 2011)

in the development of an area.<sup>147</sup> In addition, garages provided a public service by offering the storing and repairing of cars. 3-17 East 102<sup>nd</sup> Street is an example of a garage erected in the 1920s that was part of a development plan for a neighborhood.

### **4650 Broadway/ 2 Sherman Avenue (1926):**

Albert Kahn designed the combination showroom and storage facility at 2 Sherman Avenue in 1926 for the Packard Motor Car Company. [Plate 3.26] This was the second building Kahn designed for this company in Manhattan. The first showroom Kahn designed was Packard's main showroom at 61<sup>st</sup> Street and Broadway, which was erected in 1907. [Plate 3.27] It was a four-story, terracotta building with a matte finish on the terracotta and concrete slab interior.<sup>148</sup> Kahn was the favorite architect of auto industrialists. He designed well over one thousand buildings in his lifetime, and had a long-term working relationship with Packard Motor Car Company, along with other automobile companies like Ford. Kahn designed Packard's automotive plant in Detroit, which is now demolished. He also designed their showrooms in Chicago and Boston.<sup>149</sup> 2 Sherman Avenue is the only remaining Kahn designed Packard structure in Manhattan.

Having a similar material make-up to other Packard garage designed by Kahn at 1540 Broadway, which has been demolished, the garage at 2 Sherman Avenue has terracotta ornamentation and a concrete slab system in the interior. Throughout its history, 2 Sherman Avenue historically played a role in Packard's development and history in New York. The store garage combination opened the same year Packard branded the slogan, "Ask the man who owns one!"<sup>150</sup> In 1928, 2 Sherman Avenue set the record for Packard auto sales in the New York metropolitan area.<sup>151</sup>

Now under threat, the site was acquired by Acadia Realty Trust in 2005. The Acadia Realty Trust plans to develop a massive high-rise building on the site.<sup>152</sup> This would destroy one of the few remaining Kahn designed Packard buildings in the country, and the only in New York.

---

<sup>147</sup> (Jakle and Sculle 2004), 48

<sup>148</sup> (Cornstock 1911), 75

<sup>149</sup> (Baulch n.d.)

<sup>150</sup> (News From Automotive Field: Packard Show Big Success 1928)

<sup>151</sup> Ibid

<sup>152</sup> (Portfolio - Sherman Plaza: Acadia Realty Trust n.d.)

## 152 East 87<sup>th</sup> Street (1929):

152 East 87<sup>th</sup> Street, the Alan Garage, was designed by J.H. Galloway in 1929. [Plate 3.28] This garage was built as part of an entertainment development scheme. It was not part of a residential development plan like the majority of the garages surveyed. The garage was erected alongside a hotel and theater, the Lowes on 86<sup>th</sup> Street.<sup>153</sup> As the car became more and more popular, it became easier to commute between the city and the boroughs. In addition, more people were driving cars into Manhattan on a regular basis from New Jersey, Connecticut, and Long Island. As it became easier to commute, many more people came to the city by car to see shows and movies and for a night out on the town. In order to meet this new demand, entertainment-oriented blocks started to develop in Manhattan. A garage was necessary for these areas. They provided convenience, comfort, and safety for those coming into the city.<sup>154</sup>

In the specific case of 152 East 87<sup>th</sup> Street, challenges had to be overcome to build this garage. Due to zoning restrictions, garages were not permitted on East 87<sup>th</sup> Street. This meant it needed a special variance to be built. The owners appealed to the Board of Standards and Appeals for an exemption. This appeal was met with considerable opposition. The Board compromised by requiring that the "front elevation shall be designed in attractive architectural treatment . . . with face brick and architectural terra cotta."<sup>155</sup> In addition, the building had to have limited signage.

Frank J. Schefcik was the final designer on the project. He completely scrapped the designs of James H. Galloway, who was the original architect on the project. His garage had white stripes running up the façade, with floral ornamentation in yellow and green. This was all of glazed terracotta. Auto tires appear in terracotta at the top floor. This is the auto substitute for the projecting a horse's head, which was often used on stable buildings. In addition, terracotta red letters spelling out the "The Alan Garage" were written in relief on the ground floor.

It was named the "The Alan Garage" for Alan Ornstein, whose family owned the garage from its inception. It had a waiting room behind the glass window with its name inscribed in silver leaf. Ornstein sold the garage in 1979 to the Meyers Parking System Company, which

---

<sup>153</sup> (C. Gray, *Streetscapes: Alan Garage-Franklin Hotel; Unusual Combination for Conflict* 1989)

<sup>154</sup> (McDonald 2007), 58 - 69

<sup>155</sup> (C. Gray, *Streetscapes: Alan Garage-Franklin Hotel; Unusual Combination for Conflict* 1989)



operates the garage as a commercial enterprise.<sup>156</sup> The garage's future is in jeopardy because its façade was stripped by the current owner. The site has the potential to be developed for a 15 to 18-story building.

#### **406 East 91<sup>st</sup> Street (1930):**

The Croyden Garage, designed by Horace Ginsbern in 1930, is a striking piece of architecture. [Plate 3.29] This Art-Deco garage had zigzag decoration in multicolored brick.<sup>157</sup> Ginsbern was a New York architect who studied at Columbia University. In the 1920s, he worked on smaller projects like the storefront for 543 Fifth Avenue. By the 1930s, Ginsbern was working in the Moderne and Art-Deco styles. An example of his work is the 1936 apartment building at 1150 Grand Concourse in the Bronx, which was built in 1936 for Grand Towers, Inc. His design for the apartment complex at 2121 Grand Concourse was referred to by the American Institute of Architects as, "Art-Deco at its Best."<sup>158</sup> The Croyden Garage is an example of Ginsbern's work as a prominent Art-Deco architect. The garage also marks the point in time when Art-Deco became the preferred architectural style. Prior to this time, garages were primarily constructed in three major styles: Beaux-Arts, Romanesque Revival, or Art and Crafts.

It was used as garage until 1944, at which time it was speculated that the building would be converted into apartments. The venture was short-lived, and in 1948 the building was back to being a working garage with the addition of light manufacturing. A complete interior renovation could only be done if there was light manufacturing in the building. Shortly after 1966, the garage was listed as having no manufacturing programming. For this reason, it is unlikely that the garage ever contained manufacturing. In 1966, the garage was listed as having a repair shop in addition to storing automobiles. It is possible that in 1948 the garage already contained a repair or body shop that was listed as light manufacturing on the Department of Buildings' certificate of occupancy.. In 1973, the building added office programming.<sup>159</sup> The building functioned as a garage, repair shop, and office until 2008. It was owned by Verizon, which used the building as a storage and repair center for its vehicles.

---

<sup>156</sup> Ibid

<sup>157</sup> (C. Gray, *Streetscapes: For the Car, and Far From Pedestrian* 2010)

<sup>158</sup> (C. Gray, *Streetscapes/Readers' Questions; Chrysler Building's Predecessor; Modernist Architect* 2001)

<sup>159</sup> (DOB Building Information Search 2013)

In 2008, the building came under threat when the Sacred Heart School bought it for twenty-three million dollars from Verizon. The school originally planned to raze the building and build offices, a gym and a pool on the site. In 2012, new plans showed the garage being converted into an Athletic and Wellness Center.<sup>160</sup> As of 2013, this site was under construction. The Croyden Garage is an example of the potential of adaptive reuse when for buildings that cannot continue to function as garages.

---

<sup>160</sup> (406 East 91st Street: Curbed NY n.d.)



**Plate 3.1:** 177 East 73<sup>rd</sup> Street Garage, NY; designed by Charles Hoppe in 1906

Picture: Museum of the City of New York, Wurts Bros, 1905



**Plate 3.2:** Kent Automatic Parking Garage at 34 W. 61<sup>st</sup> Street, NY; designed by Jardine, Hill & Murdock in 1929

Picture: *The New York Times*, Courtesy of Office of Metropolitan History, 1929



**Plate 3.3:** A.T. Demarest and Peerless Motor Car Company Building at 224 W. 57<sup>th</sup> Street, NY; designed by Francis H. Kimball in 1909

Photograph By: Hilary Grossman, 2013





**Plate 3.4:** US Rubber Company at 1790 Broadway, NY designed by Carrere & Hastings in 1911

Photograph By: Hilary Grossman, 2013



**Plate 3.5.:** B.F. Goodrich Company at 1780 Broadway, NY designed by Howard Van Doren Shaw and Ward & Willauer in 1909

Photograph By: Hilary Grossman, 2013



**Plate 3.6:** 168 East 70<sup>th</sup> Street Garage designed by C.P.H Gilbert in 1901

Picture: *Garages and Motor Boat Houses*, 1911, pg 60



GARAGES AT 163 AND 165 E. 70TH STREET, NEW YORK

C. P. H. Gilbert, Architect

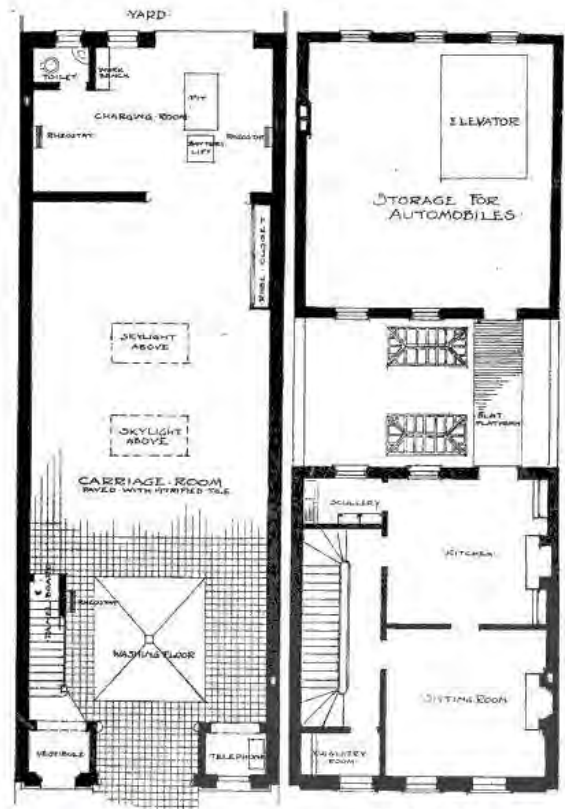
**Plate 3.7:** 163 & 165 East 70<sup>th</sup> Street Garages, designed by C.P.H Gilbert in 1901

Picture: *Garages and Motor Boat Houses*, 1911, pg 59



**Plate 3.8:** 55 East 90<sup>th</sup> Street, NY the Carnegie Garage, designed by Whitfield and King in 1904

Picture: *Garages and Motor Boat Houses*, 1911, pg 51



**Plate 3.9:** 55 East 90<sup>th</sup> Street First and Second Floor Plans  
A GARAGE ERECTED FOR MR. ANDREW CARNEGIE, N. Y. CITY  
Whitfield & King, Architects

**Plate 3.9:** 55 East 90<sup>th</sup> Street First and Second Floor Plans

Picture: *Garages and Motor Boat Houses*, 1911, pg 53



**Plate 3.10:** 55 East 90<sup>th</sup> Street, 2013

Photograph By: Hilary Grossman, 2013



**Plate 3.11:** 102 West 107<sup>th</sup> Street, NY the Atlas Garage designed by Fredrick Browne in 1906

Photograph By:  
Hilary Grossman,  
2013





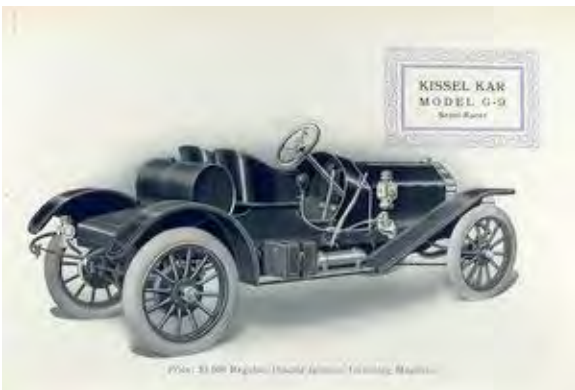
**Plate 3.12:** 214 West 80<sup>th</sup> Street, NY the Aphthorp Garage; designed by C.B. Brun in 1906

Picture: *The Parking Garage: Design and Evolution of a Modern Urban Form*, pg 103 (1913)



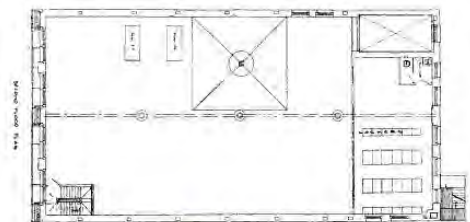
**Plate 3.14:** Acton Garage at 137 W. 89<sup>th</sup> Street, NY; designed by Lafayette Goldstone in 1906

Picture: *Garages and Motor Boat Houses*, 1911, pg 77

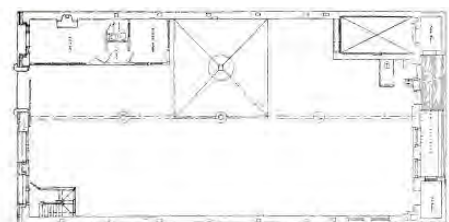


**Plate 3.13:** Kissel Kar

Picture: Courtesy of the New York Public Library, 1909



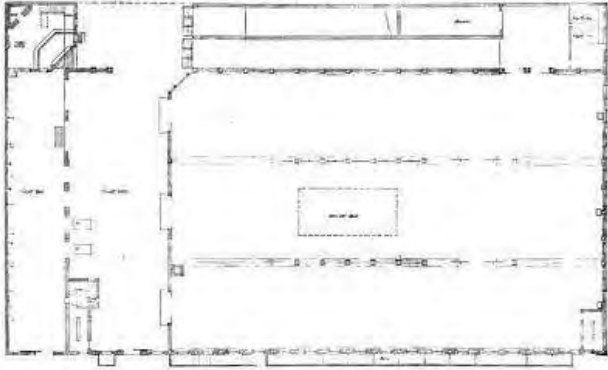
**Plate 3.15:** Acton Garage First and Second Floor Plans



ACTON GARAGE—FIRST AND SECOND FLOOR PLANS  
L. A. Goldstone, Architect

Picture: *Garages and Motor Boat Houses*, 1911, pg 79





**Plate 3.16:** New York Taxicab Company Garage and Floor Plan designed in F.M. Andrews & Co. in 1908

Picture: *Garages and Motor Boat Houses*, 1911, pg 87



**Plate 3.17:** Cedarhurst Motor Livery Garage at 147 W. 83<sup>rd</sup> Street, 2013

Photograph By: Hilary Grossman, 2013



**Plate 3.18:** Nicolas-Frayer Miller Cab

Picture: *Operation & Maintenance*, "New Frayer-Miller Cab", November 1908



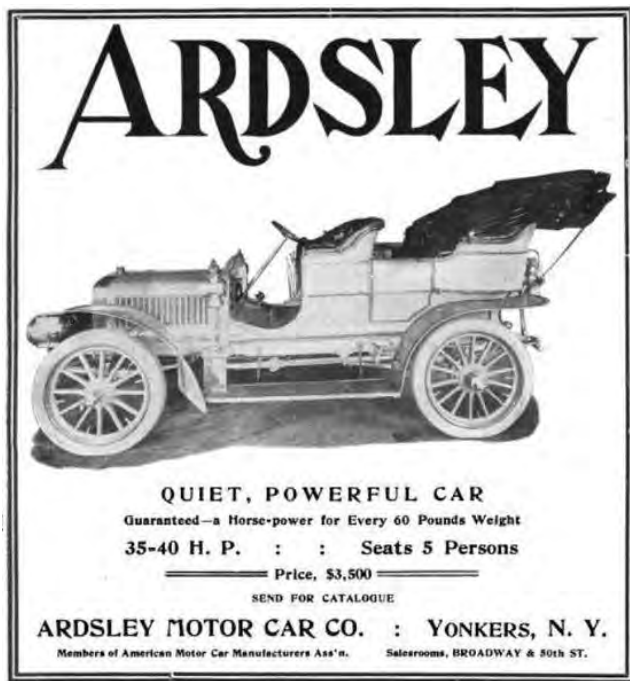
**Plate 3.19:** 1987 Hansom Cab

Picture: Courtesy of [www.pbs.org](http://www.pbs.org), "Taxi History"



**Plate 3.20:** 159-165 East 77<sup>th</sup> Street Garage designed by George Pelham in 1913

Photograph By: Hilary Grossman, 2013



**Plate 3.21:** Ardsley Motor Car Advertisement

Picture: *Modern Motor Cars*, Volume 5 (1906)

Current Use of Manhattan Parking Garages with 1916 Zoning Use Plates Underlay (Erected between 1900 and 1930 that still exist in 2013)



Data Sources: New York City Department of Buildings, and the 1916 Zoning Use Map Courtesy of the NYPL  
Base Map: NYC Department of City Planning, 2010, Map by: Hilary Grossman

**Plate 3.22**

Post 1916 Zoning Upper Eastside Parking Garages (Erected between 1900 and 1930 that still exist in 2013)



Data Sources: New York City Department of Buildings, and the 1916 Zoning Use Map Courtesy of the NYPL  
Base Map: NYC Department of City Planning, 2010, Map by: Hilary Grossman

**Plate 3.23**





**Plate 3.24:** 337 East 64<sup>th</sup> Street Garage designed by Hunt and Hunt in 1917

Photograph By: Hilary Grossman, 2013



**Plate 3.25:** 3-17 East 102<sup>nd</sup> Street designed by Emery Roth in 1924

Photograph By: Hilary Grossman, 2013





**Plate 3.26:** 2 Sherman Avenue the Packard Garage designed by Albert Kahn, 2013

**Plate 3.27:** Packard Showroom at 61<sup>st</sup> Street and Broadway designed by Albert Kahn, 1911

Photograph By: Hilary Grossman, 2013

Picture: *Garages and Motor Boat Houses*, 1911, pg 75



**Plate 3.28:** 152 East 87<sup>th</sup> Street Garage, designed by J.H. Galloway in 1929

Picture: *The New York Times*, Courtesy of Jerome Weinstein, 1930



**Plate 3.29:** 406 East 91<sup>st</sup> Street the Croyden Garage, designed by Horace Ginsbern in 1930

Picture: *The New York Times*, Courtesy of the Office for Metropolitan History, 1955

## **Chapter Four: Preservation**

### **Introduction:**

Garages are constantly under threat, which can clearly be seen throughout the survey. In fact, a large number of garages in Manhattan that were worthy of preserving have already been lost. Many would argue that the greatest loss of automobile related architecture in Manhattan was the demolition of “Automobile Row,” which held the Palmer & Singer Garage at Broadway and 50<sup>th</sup> Street [Plate 4.1], the Smith & Mabley Garage at Broadway and 56<sup>th</sup> Street, the New York Decauville Garage at Broadway and 57<sup>th</sup> Street [See Plate 1.9], the Packard Garage at Broadway and 61<sup>st</sup> Street [Plate 4.2], the Goelet Garage at Broadway and 64<sup>th</sup> Street [Plate 4.3], the Winton Garage at Broadway and 70<sup>th</sup> Street [Plate 4.4], and the Jones Speedometer Garage at Broadway and 76<sup>th</sup> Street [Plate 4.5].

Other notable garages have been demolished throughout the city. Among these losses are the Automobile Club of America at 247-59 West 54<sup>th</sup> Street [Plate 4.6], the Hoyt & DeMallie Garage at 55 West 93<sup>rd</sup> Street [Plate 4.7], the Royal Garage at 215 West 95<sup>th</sup> Street [Plate 4.8], the Devon Garage at 206 East 65<sup>th</sup> Street [Plate 4.9], and the Tunnel Garage at 520 Broome Street [Plate 4.10]. Four garages identified in the survey are in the process of being demolished. They are 316 West 118<sup>th</sup> Street, 641 West 59<sup>th</sup> Street, the Croyden Garage at 406 - 416 East 91<sup>st</sup> Street, 2 Sherman Avenue, and 55 East 125<sup>th</sup> Street. [See Survey Pages 61,69,74,67,54]

With the demolition of these garages, New York has lost great works of architecture that were designed by prominent architects. When these garages were destroyed, we lost important structures that reflected New York’s historical prominence as a center for automobile sales and production in the early 20<sup>th</sup> century. In order to better understand what has been lost, and the need to preserve the important garages that remain, I will begin with an overview of the historic void that was left by the destruction of garages on “Automobile Row.” Many of these garages could have been adaptively re-used in a way that kept the historic character of the street while meeting modern demands.

The Palmer & Singer Manufacturing Co. Garage was a five-story reinforced concrete building designed by Marvin & Davis Architects.<sup>161</sup> [Plate 4.1] The firm of Marvin & Davis is known for their design of the Knickerbocker Hotel at 6 Times Square. For the Palmer & Singer

---

<sup>161</sup> (Cornstock 1911), 70

Garage building, the architects chose a simple design that featured the concrete construction. The interior, as well as the exterior, was finished in a cement surface. The garage featured a showroom on the Broadway side, with the garage entrance on the 7<sup>th</sup> Avenue side. It had a series of ten-by-twenty foot elevators and turntables that efficiently moved cars. This garage had chauffeurs' rooms, locker rooms, showers, offices, and a repair shop. Its estimated storage capacity was one hundred and seventy-five cars. Erected in 1910, the Palmer & Singer Garage was one of the first structures to fully embrace a new modern aesthetic.<sup>162</sup> Setting itself apart stylistically with its concrete façade, the Palmer & Singer Garage was an iconic symbol of the major changes that took place during the early twentieth century. It is a symbol forever lost.

Right down the block at 61<sup>st</sup> and Broadway was the Packard Garage, [Plate 4.2] which was designed by Albert Kahn and erected in 1907. The exterior façade was composed of white terra cotta with a matte finish. Standing four-stories tall, the garage featured a series of bays composed of windows that had metal frames that spanned all four-stories and lighting the interior of the structure. On the interior, the garage used Julius Kahn's system of reinforced concrete. Julius, who was an engineer, was the younger brother of the famous architect, Albert Kahn. The Kahn system consisted of embedding the Kahn Bar into concrete beams and columns. The Kahn Bar was a metal rolled bar with wings, which were sliced and bent at regular intervals directly from a single rolled section. In summary, the Kahn Bar consists of half a truss strengthening the concrete.<sup>163</sup> At the time of construction, Kahn's Packard Garage was considered one of the most striking buildings on Broadway. In addition to providing storage, the garage's showroom featured limousines, landaulets, and touring cars for sale. Packard sold the building in 1958.<sup>164</sup> It was demolished in 1963. The Packard Garage was an important example of Kahn's architectural work. It was an emblem of the power of the emerging auto industry in the early twentieth century, and an major part of Broadway's "Automobile Row" that was worthy of saving.

Another monumental garage that was erected in 1907, as part of "Automobile Row," was the Goelet Garage at Broadway and 64<sup>th</sup> Street. [Plate 4.3] The Goelet Garage was designed by Frank M. Andrew & Co. and Maynicke & Franke in the Chicago Loft-style.<sup>165</sup> It was one of the largest commercial garages in Manhattan at the time of its construction. It stood six-stories high,

---

<sup>162</sup> (Cornstock 1911)71

<sup>163</sup> (Kahn System of Reinforced Concrete 1904)

<sup>164</sup> (C. Gray, *Streetscapes: When Packards and Other Dinosaurs Roamed Broadway* 2006)

<sup>165</sup> (Dunlap 1997)



and was built in reinforced concrete. The exterior was made from light colored brick and terra cotta with wrought iron trimmings. The interior was split between sales on the ground level and storage, repair, and assembly on the upper levels. [Plate 4.11] The building had four elevators, two passenger elevators and two freight elevators, which carried the cars between levels. Each floor held space for storage, pits for repair, and wash racks.<sup>166</sup> The Goelet Garage was one of the last remaining garages of “Automobile Row.” When it was being threatened with demolition, the preservation advocacy group Landmark West! led a campaign in 1997 to designate the building as a New York City landmark. The group advocated saving the building by calling it, “the principal form giver for the modern incarnation of [Lincoln] Square”<sup>167</sup>. Group members also argued that it was worthy of saving because it was one of New York’s early automobile garages. In 1999, the New York City Landmarks Commission denied the request.<sup>168</sup> This led to the building’s demolition in 2002.

All that is left of “Automobile Row” are the following landmarked buildings: the A.T. Demarest and Peerless Motor Car Company Building at 224-28 West 57<sup>th</sup> Street [See Plate 3.3], the U.S. Rubber Company Building at 1790 Broadway [See Plate 3.4], the Ford Motor Company Building at 1710 Broadway [See Plate 1.8], and the B.F. Goodrich Company Building at 1780 Broadway[See Plate 3.5].<sup>169</sup> Of the preserved buildings, none are the purpose built garages that contributed just as much to the character, prosperity, and development of “Automobile Row” as the automobile company office and showroom buildings. Broadway was once lined from 42<sup>nd</sup> Street to 72<sup>nd</sup> Street with automobile dealers, automobile service buildings, automobile suppliers, and other related businesses. In 1910, a *New York Times* article called it “the automobile center of the country.”<sup>170</sup> New Yorkers today have no idea that their city was once a leader in the automobile industry when it came to garages, automobile manufacturing buildings, and showrooms. The demolition of all these buildings along “Automobile Row” also destroyed part of the city’s history.

Right near “Automobile Row” was the Automobile Club of America Clubhouse and Garage at 247 West 54<sup>th</sup> Street between Broadway and 8<sup>th</sup> Avenue. [Plate 4.6] Designed by Ernest Flagg, it was erected from 1905 to 1907. The garage was an eight-story building

---

<sup>166</sup> (Cornstock 1911), 80

<sup>167</sup> (London 1997)

<sup>168</sup> (Missing Finger Denial: LandmarkWest 1999)

<sup>169</sup> (B.F Goodrich Company Building 2009)

<sup>170</sup> (C. Gray, Automobile Row: The Car Is Still King on 11th Avenue 2006)

constructed of white brick and polychrome terra cotta on the exterior façade. Its interior was characterized by fine stone such as marble. The clubhouse had four floors for storage, and areas for automobile repair work. These floors could be reached by an elevator, which had the ability to carry up to four tons. Each floor had a turntable designated for storage. The garage clubhouse was electrified, and it had a telephone to call the chauffeurs who had their own quarters in the clubhouse. [Plate 4.12] The interior was decorated in the Renaissance Revival Style, while the outside featured a mix of two styles - Beaux-Arts and Modern. It had seven large window bays surrounded in terracotta ornament and brick. The second story was defined by double height arched window bays with balconies, while the upper stories had large industrial windows. This established a separation between the club on the second story, and the garage on the upper stories.<sup>171</sup>

The garage clubhouse was architecturally striking. It combined the modern construction system of reinforced concrete with classical design. The Automobile Club of America was a place where many personal interactions took place that helped change automobile culture in our country. The club members, known as the Millionaire's Club, were powerbrokers who had tremendous influence on the direction that the automobile industry would take during that period. They lobbied for better parking and traffic rules, which ultimately led to street side parking. The club members were among the first auto owners, and they were among the first Americans to construct private garages.<sup>172</sup> This building's striking architecture, coupled with the role its members played in establishing the country's auto culture, should have been enough to ensure its preservation. Unfortunately that was not the case. The building was demolished in 1975. All historic traces of the Automobile Club of America's presence in Midtown West have been erased.

Another garage that has been erased from the Upper West Side is the Hoyt & DeMallie Garage at 55 West 93<sup>rd</sup> Street. [Plate 4.7] The garage was designed by Snelling and Potter in 1905.<sup>173</sup> It was three-stories with a basement. The first floor, which had a ceiling height of eighteen feet, was used for "live" storage. The second floor and third floor had a ceiling height of fifteen feet. The second floor was used for "dead" storage. The repair shop was on the third floor. The front façade had piers spanning the three-stories, with large windows in-between. The

---

<sup>171</sup> (Fink 1970), 217

<sup>172</sup> (Fink 1970), 218

<sup>173</sup> (Cornstock 1911), 73

façade was topped by an ornamented cornice. In the center of the cornice was a terra cotta relief that represented a speeding automobile. What made the Hoyt & DeMallie Garage stand out was the construction methods used to build it. The interior was constructed with reinforced concrete using a light bar, perforated at intervals, mixed within the concrete beams instead of iron bars cast in poured concrete. The new system designed for the garage allowed for a span of fifty feet without having a column. This allowed for a completely open interior.<sup>174</sup> Demolished in 1985, the Hoyt & DeMallie Garage was an architecturally stunning building. It was a prime example of innovative early construction practices. For these reasons, it should not have been demolished.

The most prominent garage to be demolished was the Tunnel Garage at 520 Broome Street. [Plate 4.10] Erected in 1922, the Tunnel Garage was designed by Hector Hamilton. It was built on speculation, with the expectation that a large garage would be needed to service the increased traffic flow brought about by the completion of the Holland Tunnel in 1927. In addition, more cars were coming into this downtown area due to the southerly extension of 7<sup>th</sup> Avenue completed in 1914. The two-story garage held one hundred and eighty-eight cars. The garage was well known for its large terra cotta plaque showing a car, which was a Model-T Ford, in a tunnel. In addition, it was known for its aqua-colored bands, and the graphic text that said “Tunnel Garage.”<sup>175</sup>

It was demolished in 2006 even after an intensive petitioning effort to save it. There was massive opposition from the preservation community to the demolition of this garage. Groups such as the Art Deco Society of New York, the Greenwich Village Society for Historic Preservation, the SoHo Alliance, the Historic Districts Council, Friends of Terra Cotta, and Friends of the Tunnel Garage all advocated for the building to be landmarked. Those who rallied to save the garage cited its historic importance as one of the early purpose built garages in New York, its high architectural quality, and the continuing economic viability of the garage.

In 2004, the New York City’s Planning Department changed the zoning regulations in SoHo, allowing residential development on parking lots. As a result, many garages in the area were being demolished. If the Tunnel Garage had stayed open, it would have been a gold mine for the owners because of the strong demand for parking in the area. The organizations fighting to save the Tunnel Garage applied for landmark status and National Register status for the

---

<sup>174</sup> (The Horseless Age 1906)

<sup>175</sup> (C. Gray, *Streetscapes: For the Car, and Far From Pedestrian* 2010)



building. Before its demise, the Tunnel Garage was granted eligibility status on the State Register and the National Register. There are two levels to the National Register system. A building is nominated to the State Historic Preservation Office. The state office then determines if the building is eligible or not. If the building is determined eligible, it goes to the State Review Board. From the Review Board, it is determined if the building is a National Register worthy building. If the building is determined worthy, it becomes listed on the State Register of Historic Places. From there it goes to the National Register of Historic Places. Even with this status, the fight was lost. The building was demolished in 2006. The only good news was that the owner consented to putting the Garage's famous terracotta plaque in the lobby of the new apartment complex on the site.<sup>176</sup>

Before the demolition of the Tunnel Garage, its eligibility status for listing on the State and National Register of Historic Places due to its significant architecture and history was not enough. The Tunnel Garage was not granted full Register status because owner consent is needed to be listed. If the owners had consented to the nomination, they would have been eligible for grants and loans to help maintain and restore the building. This would have enabled them to keep the Tunnel Garage open, and the owners would have had an excellent chance to turn a profit.

The loss of the Tunnel Garage, as well as many other garages that played a critical role in New York's construction and cultural history, should spur the preservation movement to make sure that the notable garages that are left will not be demolished. It is unfortunate that early garages have been overlooked. This negates that fact that at one time these garages were a noted architectural accomplishment. Beginning in the early 1900s, the garage played a central role in employing many of the latest advancements in construction technology, including fireproofing measures. These early garages were designed by prominent and prolific architects. They showed how cars can be stored in a non-imposing way, and how parking solutions can be fit into the context of the neighborhood. Lastly, the garages erected in the early 20<sup>th</sup> century helped spearhead the growth of the auto industry in New York. In the early 1900s, New York was the only city in the world that had enough parking to accommodate all the cars coming into the city.

Historically, preserving car infrastructure and buildings that were used for the progression of the automobile industry was always a fight, especially in New York. The

---

<sup>176</sup> (Berman n.d.)

preservation community in New York came to fruition when people organized to protest urban renewal projects. These urban renewal projects gutted neighborhoods to make way for new developments such as Lincoln Center. This was the case with new car infrastructure projects like the Cross Bronx Expressway, which divided neighborhoods and tore down buildings. Due to the connection that cars had with urban renewal projects that destroyed neighborhoods, there was a growing distaste by the general public to the continued growth of car related infrastructure. This gave further impetus to the early preservation movement in New York City. Even though car related issues were of concern in the 1960s, they weren't the highest priority for the preservationists of that time. They focused their efforts instead on saving other forms of transportation infrastructure, like fighting the destruction of Pennsylvania Station.

Today, the discourse about preserving car infrastructure has increased in large part due to people's increasing concerns about how cars are affecting the quality of life of our cities, and how the industry in the U.S has been mismanaged. There is a widespread backlash against the U.S. car industry, which is perceived by most Americans as being too slow to adapt to rising gas prices and environmental concerns. Many Americans were upset by the subsidies the federal government gave to General Motors and Chrysler when the financial crisis began in 2008. Even though this money was paid back, the near bankruptcy faced by these companies brought to the fore years of poor management decisions. In addition, people are concerned about the imposing infrastructure that cars bring about on our cityscape, including massive highways and freeways that often divide neighborhoods.

Due to all of this discontent related to cars, the necessary infrastructure to support them has fallen out of favor in popular culture. This has brought about an increasing threat against this infrastructure. For all of the concerning issues that cars bring about, they are still a fundamental part of American culture. This is why it is imperative that we preserve the remaining infrastructure that played an important historic role in the development of the car in America, and reflect the car's massive impact on our society.

Most interestingly, the perception and mission of early garages were in stark contrast to how the automobile industry and its related facilities are viewed today. The early garages were created to fit into the surrounding built environment. They were designed to bridge the gap between the auto industry and the pedestrian. This made it possible to easily adapt these buildings to meet alternative purposes. Whenever possible, garages that are no longer

economically viable should be adapted to meet other needs. This is a far better than destroying an integral part of our city's history. Unfortunately, the current trend is to tear garages down, as seen by the destruction of 2 Sherman Avenue and 406 East 91<sup>st</sup> Street. [See Survey Page 74]

### **Preservation Recommendations:**

Preservationists have struggled in the past to landmark garages. This was the case with Landmark West's struggle to preserve the Goelet Garage, as well as the Greenwich Village Society for Historic Preservation's failed struggle to preserve the Tunnel Garage. When looked at individually, garages are hard to make a case for when it comes to preservation. The only effective way to advocate for garage preservation in the future is to build a case that connects the garage to a larger historic context. This could include how garages reflect the history of the automobile industry.

On an individual basis, today's garages of note have to be appreciated for being among the most intact buildings when it comes to construction materials and functionality. Still maintaining their original function, garages mostly have a large percentage of their original fabric. This includes their historic windows. This is the case because there is little demand to revitalize or update them. A case must be made that these building are worthy of preservation because of their authenticity and historical importance. These two elements have to be part of a strong claim for the preservation of the early garage.

As always, well designed buildings or structures designed by well-known architects will have a greater chance of receiving preservation status. As this survey points out, there are some architecturally notable garages remaining in Manhattan that are worthy of preserving strictly for this reason. These are the exceptions. Whenever possible, it would be better to put the saving of an individual garage within the context of the totality of garage history in New York. It is the multiple stories about different facets of New York's garages that show how these buildings have positively impacted the history and culture of the city. That is why my recommendation for the preservation of garages is a serial nomination to the National Register of Historic Places.

The National Register already recognizes the value of garages, and how they mark certain trends regarding how the automobile changed the built environment throughout the United States. The National Park Service, in conjunction with the Department of Interior, published a bulletin on the preservation of garages and their importance to historic districts and the built



environment. In addition, the bulletin covered conservation methods for preserving garages and their general maintenance. The bulletin goes into case studies on how to update garages to meet modern building codes, while still maintaining the historic fabric and character of garages.<sup>177</sup> As a result of the National Register's acknowledgment of the importance of garages, seventy-seven garages outside of Manhattan have obtained individual listings on the Register.

Serial nominations are a growing trend in preservation. Regarded as a single nomination, serial nominations allow for a larger story to be told. The National Register provides tax incentives for owners. The incentive of a tax credit makes it more likely for garage owners to consent to designation. Owner consent is mandatory for inclusion in the Register. Otherwise, the building is just listed as eligible for listing on the Register.

Garage owners are very suspicious about having their buildings landmarked because they feel it will greatly restrict the way they can make what they view as necessary changes in the structure. This suspicion can be seen in the case of 152 East 87<sup>th</sup> Street. A *New York Times* article said this garage could potentially be a landmark. Later that year, the façade was stripped and redesigned in multi-colored brick. While the owner denied it was to prevent the possible landmark designation, the timing of this façade change was highly suspicious. It would be less threatening to owner to start off with the Register, and then move on for landmark designation consideration.

It is vital to better educate the preservation community, architecture educators, and the public-at-large about the historic importance of the garage. Garages should be included in studies of commercial architecture. In addition, their preservation could be added into the discussion at architectural schools, as well as at preservation or architectural conferences. They are an important reflection of how the Modern Age's car-focused society came about. It is also important to educate garage owners about the history and importance of their buildings. These owners should be made aware of the economic benefits that can come from preservation.

The preservation of noteworthy garages would gain support if there was a greater effort to reach out to the thousands of car enthusiasts that collect and work on early automobiles. These enthusiasts have strong potential to become outstanding spokespersons and advocates on behalf of historic garage preservation. They would be a wonderful addition to support the work of preservationists and architectural groups working to save garages. By getting another advocacy

---

<sup>177</sup> (Halda 1989)

group involved in the process, more pressure would be brought to bear on commissions and state boards that oversee the preservation designation of garages.

Another form of preservation that should be encouraged is adaptively re-using garages that are no longer economically viable. If done properly, adaptive re-use can maintain the formal design schemes of these buildings. By maintaining the formal design schemes, an observer can still see the architectural design styles that remain. Garages employed stable architectural features in the beginning. It was long before industrial architectural features were added. This created a type of hybrid design scheme. This hybrid format is significant because historically this is the only time this combination ever occurred. If new construction maintained these garage formal design schemes, it would have given historians and interested parties the ability to better understand these structures and the role they played historically.

The most prominent example of a successful adaptive re-use project is the Kent Automatic Parking Garage, which was first converted into the Sophia Brothers Warehouse and then the Sophia Apartments. Still maintaining its exterior shell and ornamentation, it has an outside plaque that tells the history of the building. What originally began as a historic garage has been successfully changed to meet modern demands. By not demolishing the original structure, but adapting it instead, the building continues to keep the historic character of the Lincoln Square area intact. Another adaptive re-use project is 168 East 70<sup>th</sup> Street. What started out as the David Reid's Garage was converted into the New York School of Interior Design. The building maintains its large arched wooden doors and large windows. Keeping the style of the stable, the school retains its formal scheme.

An example of a bad adaptive re-use is the Carnegie Garage at 55 East 90<sup>th</sup> Street. [Plate 3.10] The building has lost its historic design scheme, as well as its interior layout. The second and third- stories have been scraped of any of their original ornamentation. They are designed to match the upper three-story addition. The windows on the second and third-stories have been enlarged, and they now have no window sill or lintel ornamentation like the original windows. The design of the early garage was built with the intention of blending into pre-existing building typologies. The new design for 55 East 90<sup>th</sup> Street completely disregards the historic design. The building could have been better adapted quite easily by keeping the second and third floor, and adding a new but complementary design for the three-story addition. This alternative would have kept the building's historic design scheme intact, which would have allowed the building to be

preserved. Had the adaptive re-use been done correctly, the building would have been recognized for its role in the development and history of the garage.

In conclusion, garages of historic significance are worthy of being adapted to meet modern needs, and preserved when they remain economically viable. In the case of Manhattan, it is essential to create a greater awareness of how the network of garages within the city plays a crucial role in telling the story of the development of the auto industry, as well as being among the first forms of architecture built solely for the automobile. By identifying and defining the historic importance of garages built between the years 1900 – 1930 in Manhattan, this thesis has laid the groundwork for their greater appreciation and preservation.





**Plate 4.1:** Palmer & Singer Garage at Broadway and 50<sup>th</sup> Street built in 1910, now demolished, designed by Marvin & Davis

Picture: *Garages and Motor Boat Houses*, 1911, pg 70



**Plate 4.2:** Packard Showroom at 61<sup>st</sup> Street and Broadway built in 1907, now demolished, designed by Albert Kahn

Picture: *Garages and Motor Boat Houses*, 1911, pg 75



**Plate 4.3:** Goelet Garage at Broadway and 64<sup>th</sup> Street built in 1907, demolished 2002, designed by F.M. Andrew & Co.

Picture: *Garages and Motor Boat Houses*, 1911, pg 81



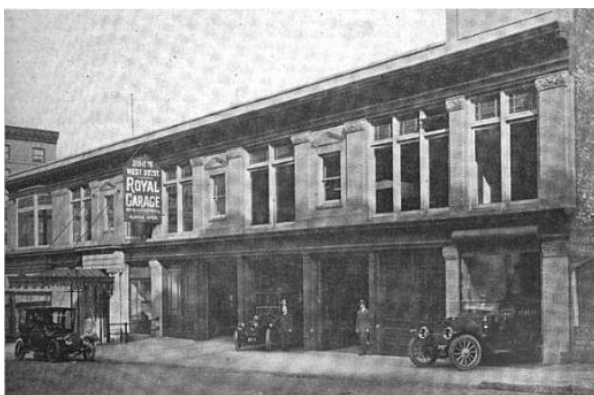
**Plate 4.4:** Winton Garage at Broadway and 70<sup>th</sup> Street, demolished

Picture: *The Horseless Age*, May 30, 1906.

**Plate 4.6:**  
Automobile  
Club of  
America  
Garage at 247  
W. 54<sup>th</sup> Street  
built in 1907,  
designed by  
Ernest Flagg,  
demolished  
1975



Picture: *The Brickbuilder*, 1907



**Plate 4.8:** Royal Garage at 215 West 95<sup>th</sup> Street, demolished

Picture: *The Horseless Age*, "Where System Pay in a Modern Garage." August 15, 1915.



**Plate 4.5:** Jones Speedometer Garage at Broadway and 76<sup>th</sup> Street, designed by Oscar Lowinson, demolished

Picture: *The Horseless Age*, 1905



**Plate 4.7:** 55 West 93<sup>rd</sup> Street Garage built in 1905, demolished 1985, designed by Snelling and Potter

Picture: *The Parking Garage: Design and Evolution of a Modern Urban Form*, pg 103 (1913)





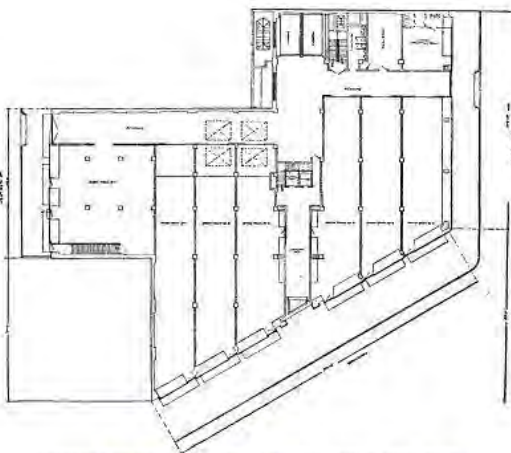
**Plate 4.9:** Devon Garage at 206 E. 65<sup>th</sup> Street, demolished

Picture: *The New York Times*, Courtesy of the Office for Metropolitan History, 1960



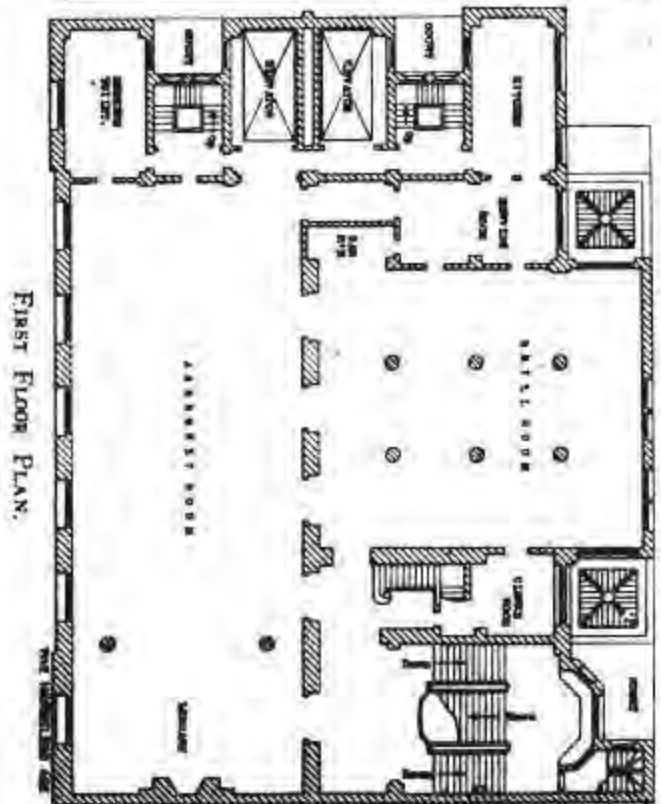
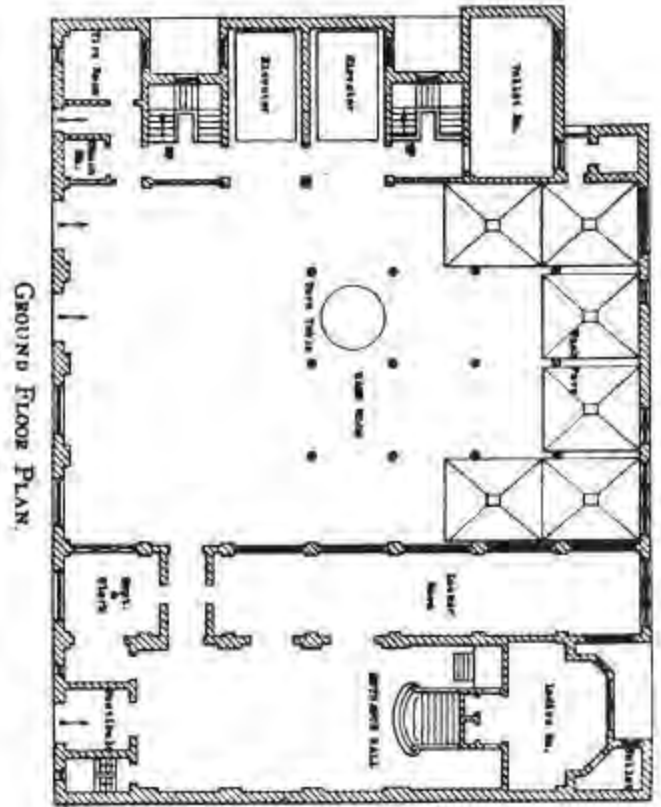
**Plate 4.10:** Tunnel Garage at 520 Broome Street built in 1922, demolished 2006, designed by Hector Hamilton

Picture: *The New York Times*, Courtesy of the Office for Metropolitan History, 1938



**Plate 4.11:** Goelet Garage Ground Floor Plan, 1911

Picture: *Garages and Motor Boat Houses*, 1911, pg 82



**Plate 4.12:** Automobile Club of America Garage Floor Plans

Picture: *The Brickbuilder*, 1907



## Bibliography

*177-179 East 73rd Street Building*. LP-1065, New York, NY: Landmarks Preservation Commission, 1980.

*406 East 91st Street: Curbed NY*. <http://ny.curbed.com/tags/406-east-91st-street> (accessed March 25, 2013).

*A.T. Demarest & Company*. LP-2082, New York: Landmarks Preservation Commission, 2000.

Aspegren, Joakim. *Re-inventing the Urban Parking Garage*. MA Thesis, New York: Columbia University, 1998.

*Automobile Topics*. "With the Wholesalers and Retailers- New York." 1922: v. 67.

*B.F Goodrich Company Building*. LP-2380, New York, NY: Landmarks Preservation Commission, 2009.

Baulch, Vivian. *Albert Kahn, the Architect of the Auto Industrialists*. [detnews.com](http://detnews.com) (accessed March 25, 2013).

Berman, Andrew. *Press Release: Greenwich Village Society for Historic Preservation*. <http://www.gvshp.org/tgdem.htm> (accessed March 25, 2013).

Bromly. *Atlas of the City of New York, Borough of Manhattan*. NYPL Digital Gallery, New York.

*Building Zone Resolution*. Government, New York, NY: Board of Estimate and Apportionment, 1916.

*Claremont Stables*. LP-1658, New York, NY: Landmarks Preservation Commission, 1900.

*Concrete for Industrial Buildings and Garage*. Chicago, IL: Portland Cement Association, 1939.

Cornstock, William Phillips. *Garages and Motor Boat Houses*. New York: The William T. Comstock Company, 1911.

*Curbed NY*. "Claremont Riding Academy." March 24, 2013: Web.

*Design of Concrete Parking Structures: Problems and Solutions*. Detroit, Michigan: American Concrete Institute, 1986.

*DOB Building Information Search*. March 23, 2013.  
<http://www.nyc.gov/html/dob/html/home/home.shtml>.

Dolkart, Andrew. *George F. Pelham*.  
[http://nycarchitecture.columbia.edu/global/0243\\_2\\_key\\_figures.html](http://nycarchitecture.columbia.edu/global/0243_2_key_figures.html) (accessed March 24, 2013).

Dolkart, Andrew. "The Acton Garage, Now the Monterey Garage: A Preliminary Investigation of Its History and Architecture." New York, 2002.

Dunlap, David W. "The Anatomy of a People Building." *The New York Times*, March 2, 1997.

- Eisenstadt, Peter R., and Laura-Eve Moss. "Parkway." *The Encyclopedia of New York State*, 2005: 217.
- Emery Roth. March 18, 2013. [http://en.wikipedia.org/wiki/Emery\\_Roth](http://en.wikipedia.org/wiki/Emery_Roth) (accessed March 24, 2013).
- Fink, James J. *America Adopts the Automobile: 1895 - 1910*. Cambridge: MIT, 1970.
- Goldstone, Aline May Lewis, and Harmon H. Goldstone. *Lafayette A. Goldstone; A Career in Architecture*. New York, 1964.
- Gray, Christopher. *Office for Metropolitan History*. October 18, 2012. <http://www.metrohistory.com/searchfront.htm> (accessed March 24, 2013).
- Gray, Christopher. "Automobile Row: The Car Is Still King on 11th Avenue." *The New York Times*, July 09, 2006: Web.
- . "Streetscapes/Readers' Questions; Chrysler Building's Predecessor; Modernist Architect." *The New York Times*, September 2, 2001.
- . "Streetscapes: Alan Garage-Franklin Hotel; Unusual Combination for Conflict." *The New York Times*, June 04, 1989.
- . "Streetscapes: For the Car, and Far From Pedestrian." *The New York Times*, June 27, 2010.
- . "Streetscapes: Former Garages; A Mansion for Me, Another for My Cars." *The New York Times*, June 14, 2009.
- . "STREETSCAPES: UPPER FIFTH AVENUE; Way Uptown in Hospital Country." *The New York Times*, May 1, 2011.
- . "Streetscapes: When Packards and Other Dinosaurs Roamed Broadway." *The New York Times*, October 1, 2006.
- Grossman, Hilary. *201 West 75th Street*. New York.
- Grutchfield, Walter. *Apthorp Motor Car Co*. <http://www.waltergrutchfield.net/apthorp.htm> (accessed March 24, 2013).
- Halda, Bonnie J. *Preservation Tech Notes: Doors Number 1; Historic Garage and Carriage Doors: Rehabilitation Solutions*. Washington, D.C.: National Park Service, 1989.
- Heldt, P.M. "The Garage Business - Buildings, Equipment, Methods." *The Horseless Age*, 1915: v. 12, 454-56.
- Helen Miller Gould Stable*. LP-1564, New York, NY: Landmarks Preservation Commission, 1989.
- Henley, Simon. *The Architecture of Parking*. New York: Thames & Hudson, 2007.
- Jackson, Kenneth T. *The Encyclopedia of Manhattan: Second Edition*. Yale UP, 210.

Jakle, John A, and Keith A. Sculle. *Lots of Parking: Land Use in a Car Culture*. Charlottesville: University of Virginia, 2004.

*Kahn System of Reinforced Concrete*. Detroit, Mich: Trussed Steel Concrete, 1904.

*Kent Automatic Parking Garage*. LP-1239, New York, NY: Landmarks Preservation Commission, 1993.

Klose, Dietrich. *Metropolitan Parking Structures; A Survey of Architectural Problems and Solutions*. New York: Praeger, 1965.

Lee, Denny. "NEIGHBORHOOD REPORT: UPPER WEST SIDE; A Little Squeak Under the Hood: Rats Have a Taste for Fan Belts." *The New York Times*, May 4, 2003.

London, Christopher W. *Automobile Row: Garage to Go?* 1997.

[www.landmarkwest.org/publications/LW!Spring97.pdf](http://www.landmarkwest.org/publications/LW!Spring97.pdf) (accessed March 25, 2013).

McDonald, Shannon Sanders. *The Parking Garage: Design and Evolution of a Modern Urban Form*. Washington D.C.: Urban Land Institute, 2007.

*Missing Finger Denial: LandmarkWest*. 1999. <http://www.landmarkwest.org/publications/LW!Fall99.pdf> (accessed March 25, 2013).

"New Public Garages." *The Accessory and Garage Journal* , 1913: 21.

*New York Herald Tribune*. "News From Automotive Field: Packard Show Big Success." April 22, 1928.

"Old New York in Photos #19." *Stuff Nobody Cares About*. (accessed March 24, 2013).

*Operation & Maintenance*. "New Frayer-Miller Cab." November 1908.

*Parking Facilities in New York City - New York City Department of City Planning*. October 18, 2012. <http://www.nyc.gov/html/dcp/html/parking/getmap.shtml?zoomifyImagePath=../gif/parking/site> (accessed March 25, 2013).

Phillips, Lou. *Cars: 1865-1965*. Xlibris Corporation, 2011.

*Portfolio - Sherman Plaza: Acadia Realty Trust*.

<http://acadia.propertycapsule.com/properties/shermanplaza> (accessed March 25, 2013).

Postal, Matthew. *New York Cab Company Stable*. Designation LP-2209, New York: New York City Landmarks Preservation Commission, Research Department, 2006.

*Richard Howland Hunt*. [http://en.wikipedia.org/wiki/Richard\\_Howland\\_Hunt](http://en.wikipedia.org/wiki/Richard_Howland_Hunt) (accessed March 24, 2013).

Rinaldi, Thomas E. *New York Neon*. New York, NY: W.W. Norton, 2013.



Roth, Emery. *Parking Garage, 3-17 East 102nd Street*. Building Plans & Elevations, New York, NY: Columbia Library, Avery Drawings & Archives, 1924.

Stern, Robert. *New York 1900: Metropolitan Architecture and Urbanism*. New York: Rizzoli, 1983.

*Taxi History*. <http://www.pbs.org/wnet/taxidreams/history/> (accessed March 24, 2013).

*The Accessory and Garage Journal*. "Contemplated Building Operations." 1913: v. 3.

*The Accessory and Garage Journal*. "Where to Get Part for Orphan Cars." 1917: v. 7.

*The City Record*. Municipal Services Administration Vol. 34 Part 8 , New York, NY: New York Public Library, 1906.

*The Horseless Age*. May 30, 1906.

*The Horseless Age*. "Another New York Taxicab Enterprise." June 17, 1908.

*The Horseless Age*. "Another New York Taxicab Enterprise." June 17, 1908.

*The Horseless Age*. "Automobile Stables." July 24, 1901.

*The Horseless Age*. "Automobile Storage and Repair Co." April 4, 1900: 27.

*The Horseless Age*. "Decauville Garage." May 30, 1906.

*The Horseless Age*. "Gas for 16 Cents at the Garage." October 14, 1914.

*The Horseless Age*. "Growth of the Garage Business." May 3, 1905.

*The Horseless Age*. "Motor Vehicle Repair and Storage Co. ." October 31, 1900: 28.

*The Horseless Age*. "Recent Garages and Garage Methods." May 22, 1907.

*The Horseless Age*. "Steam Vehicle Co. of America." November 28, 1900: 34.

*The Horseless Age*. "Storage and Repair Station in New York." April 24, 1901.

*The Horseless Age*. "Where System Pay in a Modern Garage." August 15, 1915.

*The New York Times*. "\$600,000 Garage Lease." October 10, 1922.

*The New York Times*. "3 Hurt in Crash of Water Tank: 11 Rare Old Cars Damaged as Storage Tower Plunges Through Garage Roof." March 6, 1957.

*The New York Times*. "PINCHOT BUYS GARAGE.: Five-Story East Side Structure Acquired for Investment." January 3, 1925.

*Upper East Side Historic District Designation Report, Volume 2.* New York, Ny: Landmarks Preservation Commission, 1981.

Vieyra, Daniel I. *Fill'er Up: An Architectural History of America's Gas Station.* New York: Macmillian, 1979.

Way, Henry. "Finding a Place for Your Garage: A Few Ways of Solving Problems Arising When There is Little of No Land Available." *House Beautiful*, 1919: 86.

Whalberg, Holly. "A House for the Automobile: The Changing Garage." *Old House Journal*, 1998: 61.

White Jr., Charles E. "Housing the Automobile." *House Beautiful*, 1911: 84.